

## Attributions, Coping, Self-Blame and Emotional Status in Victims of Rape and Domestic Violence

Sexual violence against women is an important and wide reaching social problem. In 2000, there were 261,000 victims of sexual assault, rape or attempted rape in the United States (Bureau of Justice Statistics, 2000). Nine out of every 10 sexual assault victims are female. One in six American women will at some point be a victim of rape or attempted rape (Bureau of Justice Statistics, 2000). Nearly one in four college aged women will be a victim of rape or attempted rape (Koss, Gidycz, & Wisniewski, 1987). Only 28% of sexual assaults are reported to law enforcement and only 16.3% of these cases result in conviction and/or jail time for the perpetrator (Bureau of Justice Statistics, 2004). Although the stereotype of rape includes a stranger as the perpetrator, approximately 62% of females knew their rapist (Bureau of Justice Statistics, 2000).

Physical violence against women is a daunting social problem as well. Each year nearly 4 million women report being abused by their husbands, boyfriends or significant partners. Ninety-five percent of all domestic assaults are against women. Women from age 19 to 29 are the most likely victims of physical violence. According to the Centers for Disease Control and Prevention (CDCP) over 500,000 women each year seek medical services due to injuries stemming from domestic violence. Sixty-two percent of these women are seen in the emergency room (CDCP, 2002). Less than 50% of domestic violence victims report their abuse to law enforcement (Rennison & Welchans, 2000). Acierno, Resnick, Kilpatrick, Saunders and Best (1999) cited past victimization, young age and post traumatic stress disorder as increasing victimization risk.

### Physical Effects of Violence

Rape victims experience debilitating physical injuries. Burgess and Holmstrom (1974; 1979) found that rape victims reported tension headaches, stomach pains, fatigue and other physical symptoms as well as various gynecological problems including chronic vaginal infections, bleeding and pain in the genital area. Other complications of rape include sexually transmitted diseases and pregnancy. Left untreated, problems such as pelvic inflammatory disease can develop, leading to reproductive difficulties and infertility (Resick, 1993). Although these complications can be treated medically, many women do not receive proper medical attention because so few rapes are reported.

Victims of domestic violence experience physical injuries as well. Domestic violence is the leading cause of injury to women between ages 15 to 44 (Uniform Crime Reports, 2002). This total includes car accidents, muggings and rape combined. Common injuries in victims of domestic violence include cuts, bruises, black eyes, trauma to vital organs and loss of hearing and vision. Defensive injuries such as burns or knife wounds occur in these victims as well (Guth & Pachter, 2000). In one study, 92% of victims reported cuts, scrapes and bruises, eleven percent reported broken bones or fractures and three percent reported gunshot wounds (Sutherland, Bybee & Sullivan, 2002). Compared to women who have not experienced physical abuse, female victims also have a significantly higher rate of health problems after abuse ends (Campbell et. al., 2002).

The annual cost of a sexual and physical assault, including police response, medical care and mental health services is estimated at 127 billion dollars, making intimate violent crime the costliest in the United States (Tjaden & Thoennes, 2000). One reason for these high costs is that

rape victims are treated with protocols specific to their victimization, as are victims of domestic violence. One purpose of the present study was to examine the premise that rape victims respond to assault differently than domestic violence victims, a comparison not previously made in the empirical literature. If victims respond similarly to violence, mental health services may not need to be specific to type of victimization, thus reducing costs.

### Emotional Effects of Violence

Rape not only affects victims' physical health and well-being, but is also emotionally injurious (Resick, 1993). Common symptoms include anxiety, depression, lowered self-esteem, perceived loss of control and post-traumatic stress disorder (Acierno et. al, 1999; Arata, 1999; Burgess & Holmstrom, 1979; Frank, Turner & Duffy, 1979; Frazier, 1990; 2000). Rape victims reported phobic anxiety and avoidance and had difficulty escaping thoughts of the event up to one year post-attack (Resick, 1993). Rape victims often exhibit extreme fear of being alone or of strangers. Victims who had no previous sexual experience may develop debilitating fear of any future sexual activity (Burgess & Holmstrom, 1974).

A high percentage of sexual assault victims experience a major depressive episode (Bicehouse & Hawker, 1993; Stein, Golding, Siegel, Burnam, Sorenson, 1988). In one sample of rape victims, forty-four percent showed moderate to severe levels of depression (Frank, Turner and Duffy, 1979). They also reported low self-esteem and high rates of helplessness and anxiety. Difficulty with post-victimization adjustment is associated with greater risk of re-victimization. In a longitudinal study, previous victimization was the strongest predictor of future sexual assault (Acierno et al., 1999). Major depression and maladaptive coping (such as drug use) were associated with increased risk of re-victimization, as was young age or a diagnosis of active PTSD (Acierno et al., 1999).

Many researchers note Post-Traumatic Stress Disorder (PTSD) symptoms in rape victims (Dunmore, Clark & Ehlers, 2001; Kessler, et. al., 1999; Lang et al., 2003). According to the National Comorbidity Survey, the trauma most likely to be associated with PTSD symptoms was rape (Kessler et al., 1999). Forty-six percent of women and sixty-five percent of men reporting rape developed PTSD. In another sample of sexually and physically assaulted subjects, PTSD symptoms were most prevalent immediately after the assault and appeared to decline significantly over time (Dunmore, Clark and Ehlers, 2001).

Psychological symptoms significantly impair a battered woman's mental status post-victimization as well (Campbell & Soeken, 1999; Clements & Sawhney, 2000; Sackett & Saunders, 1999; Stein & Kennedy, 2001). Intimate partner violence is associated with increases in depression, anxiety and PTSD (Dienemann et. al, 2000; Follingstad, Brennan, Hause, Polek & Rutledge, 1991; Jones, Hughes & Unterstaller, 2001; Stein & Kennedy, 2001). Low self-esteem is also typically found in samples of battered women (Clements, Sabourin & Spiby, 2004).

Major depression is the most common psychological disorder diagnosed in battered women (Hilberman & Munson, 1977; Stein & Kennedy, 2001). Fifty-four percent of one sample of battered women displayed mild to moderate depression, and seventeen percent were severely depressed (Sackett & Saunders, 1999). Other studies find even greater percentages of battered women displaying symptoms of depression and dysphoria (Clements & Sawhney, 2000; Follingstad et al., 1991). These findings are important because depression is associated with greater abuse severity and increased likelihood of returning to abuser (Acierno et al., 1999; Cascardi & O'Leary, 1992; Clements, Sabourin & Spiby, 2004; Dienemann et al., 2000). Moreover, depressed victims are less confident about leaving their abuser and not returning

(Lerner and Kennedy, 2000). Thus, women who are more depressed may be at greater risk for injury.

Similar to rape victims, PTSD is common following battering (Hughes & Jones, 2000; Laffaye, Kennedy & Stein, 2003). Some researchers find that PTSD following battering is more common than major depressive disorder (Duncan, Saunders, Kilpatrick, Hanson and Resnick, 1996). Battered women also exhibit anxiety disorders other than PTSD. In some samples of battered women the vast majority show anxiety symptoms (Follingstad et. al., 1991). PTSD and depressive symptoms tend to be highly correlated. The presence of both disorders in victims of rape and domestic violence is common (Stein & Kennedy, 2001).

To my knowledge no study has compared emotional status in rape victims to emotional status in battered women. Research suggests that these victims report similar symptoms even though their assaults are quite different. It is possible that such similar psychological profiles have emerged as a methodological consequence of the studies done to date. Researchers typically either study only one victim group or assess both types together, assuming that both types of violence have similar psychological sequelae. Direct comparison of rape victims to battered women would allow clinicians to determine whether victimization specific syndromes exist and therefore whether victim specific treatments are necessary.

In addition to further describing emotional consequences of victimization, researchers have begun to investigate factors that influence the likelihood such emotional consequences will develop. These variables include causal attributions for the victimization (Peterson & Seligman, 1983), perceived control, coping (Clements & Sawhney, 2001) and self-blame (Arata, 1999). We compared victim groups on these variables to assess whether different types of victimization result in different attributional, perceived control, coping and self-blame patterns. Moreover we

explored the relative contribution of these variables to depression, generalized anxiety, PTSD and self-esteem post-victimization.

### Hopelessness Theory of Depression and Causal Attributions

A number of theorists have developed vulnerability models of depression and anxiety disorders (Abramson, Seligman & Teasdale, 1978; Clements & Sawhney, 2000). One model, hopelessness theory, has been applied as an explanatory model of depressive deficits following uncontrollable stressors (Abela, Brozina & Seligman, 2004; Hankin, Abramson, Miller & Haefffel, 2004; Hilsman & Garber, 1995; Joiner et al., 2001; Robinson, Garber & Hilsman, 1995). According to hopelessness theory, individuals who feel helpless about changing the occurrences of highly valued negative life outcomes, who also make depressogenic causal attributions for those outcomes, are more vulnerable to the development of hopelessness depression (Abramson, Alloy, & Metalsky, 1989).

Many researchers have found that a depressogenic attributional style makes individuals more vulnerable to depression (Abramson & Sackeim, 1977; Alloy, Lipman & Abramson, 1992; Edelman, Ahrens & Haaga, 1994; Joiner, 2001; Peterson & Seligman, 1984). In one study, internal, stable and global attributions for negative events (the depressogenic style) predicted the onset of hopelessness depression symptoms (Alloy, Just & Panzarella, 1997). Individuals using this depressogenic style for negative events had high levels of hopelessness depression. Individuals with such a style for positive events evidenced less hopelessness depression. These researchers concluded that attributional style precedes and predicts hopelessness depression symptoms (Alloy, Just & Panzarella, 1997).

### Attributions and Victimization

Peterson and Seligman (1983) applied the logic of hopelessness theory to victimization. They suggested that specific victimization characteristics might result in greater likelihood of depressogenic causal attributions. They theorized that repeated victimization may increase the likelihood of internal, stable and global attributions. Thus, victims who have experienced more enduring assaults may be more likely to be depressed because such assaults are more likely to engender depressogenic attributions. There has been almost no research applying hopelessness theory to emotional reactions in victims of domestic violence and rape.

In this study the logic of hopelessness theory was used to investigate vulnerability to depression following domestic violence and rape. Peterson and Seligman's early research showed that the hopelessness theory is a useful explanatory model of depression following victimization. According to Peterson and Seligman, battered women should be more likely to make internal, stable and global attributions for their victimization because domestic violence is more likely to be ongoing. This may result in greater levels of depression in women who have been battered. Rape victims are usually only assaulted once and thus may be less likely to make depressogenic attributions. Because of this, rape victims may display less depression than battered women. The current study also assessed the relative contribution of causal attributions to emotional status following victimization.

#### Perceived control

In addition to investigating the role causal attributions play in depression, hopelessness theorists emphasize the role of low perceived control in increased vulnerability to depression. (Alloy & Clements, 1992; Burger & Cooper, 1979; Burger, 1989; Janoff-Bulman & Wortman, 1977; Feldner & Hekmat, 2001; Koenig, Clements & Alloy, 1992; Langer & Rodin, 1976). Control is "the belief that one has at one's disposal a response that can influence the aversiveness

of an event” (Thompson, 1981). Most investigators find that high-perceived control is associated with better physical and psychological health and low perceived control is associated with worse physical and psychological health (Auerbach et al., 2002; Feldner & Hekmat, 2001; Osowiecki & Compas, 1999; Thompson & Collins, 1995). For instance, Alloy and Clements (1992) found that college students who showed low perceived control over highly valued life outcomes reported greater depression levels than college students with high-perceived control. Other researchers have also found that high perceived control was associated with lower depression (Bohachick, Taylor, Sereika, Reeder & Anton, 2002).

In a classic study, Langer and Rodin (1976) manipulated control in elderly patients through choice. They found that a group of elderly nursing home patients given control over daily activities displayed far less depression and anxiety than patients given no such choices. In follow-up examinations, researchers found that the elderly with more control over daily choices lived longer and displayed less illness than those who had no choices. In another study of control and emotional status, participants displayed less depression if they felt that they controlled the accident that left them paralyzed. Higher depression levels were associated with low perceived control in this study (Janoff-Bulman & Wortman, 1977).

#### Perceived control and Victimization

Many researchers have studied the association between perceived control and psychological adjustment following victimization (Clements & Sawhney, 2001; Clements, Sabourin & Spiby, 2004; Frazier, 2000; Frazier, 2003). In one study, rape victims who exhibited high-perceived control over future sexual assaults displayed less depression longitudinally than victims with low perceived control (Frazier, 2000).



A number of researchers have found that battered women who exhibit high control expectations over future abuse are also less depressed (Clements & Sawhney, 2000; Clements, Sabourin & Spiby, 2004). In an application of hopelessness theory to battered women, Clements & Sawhney (2000) found that battered women with high perceived control over future abuse believed that they could avoid future occurrences of battering and were less depressed. Similar to Janoff-Bulman these authors suggested that high perceived control over future abuse was associated with better psychological adjustment in these women. (Clements & Sawhney; 2000). In this study we examined between group differences in perceived control in victims of rape and domestic violence and also investigated the role of perceived control as a determinant of emotional status.

### Coping

Coping has been defined as the use of cognitive and/or behavioral techniques to manage stress (Arata & Burkhart, 1998; Carver, Scheier & Weintraub, 1989; Finn, 1985; Folkman & Lazarus, 1988). Coping can occur in anticipation of a negative event or be used as a tool to manage emotional responses to negative experiences. Two general types of coping have been identified in the literature, problem-focused and emotion-focused. Coping strategies influence emotional adjustment through cognitive appraisal, alteration of a situation's meaning and behavioral actions regarding the event (Folkman & Lazarus, 1988).

The association between coping and psychological functioning has been examined in many samples (Glinder & Compas, 1999; Pomeroy, Green & Kiam, 2001; Rotheram-Borus et. al., 2001; Zeman, Shipman & Suveg, 2002). Researchers have found that coping mediates emotional responses to stressful life events (Folkman & Lazarus, 1988). In one study, coping mediated all emotional responses except for worry and fear in young participants. Greater use of

strategies such as planning and positive reappraisal were associated with positive mood states in older participants, and the use of strategies such as distancing were associated with less happiness (Folkman & Lazarus, 1988).

A number of studies have demonstrated that in general, problem focused coping strategies are associated with positive mood states and emotion focused coping strategies are associated with negative mood states (Aldwin & Revenson, 1987; Lerner & Kennedy, 2000; Scheier & Carver, 1985; Scheier & Carver, 1992; Suvak, Vogt, Savarese, King & King, 2002). Some coping strategies may be associated specifically with greater depression likelihood (Billings & Moos, 1984; Langrock, Compas, Keller, Merchant & Copeland, 2002). Depressed patients used significantly fewer problem-focused coping strategies, such as support seeking, than did non-depressed participants in one study (Billings & Moos, 1984).

#### Coping and Victimization

Coping techniques associated with less depression and anxiety post-rape include support seeking and activity (Burgess & Holmstrom, 1979; Meyer & Taylor, 1986; Symes, 2000). Rape victims in one study who coped with their assault by talking to others, writing about the experience or making significant life changes reported better post-rape adjustment (Draucker & Stern, 2000). In contrast to these findings, Arata and Burkhart (1998) found that greater use of active coping strategies (eg. expressiveness/social support seeking and cognitive restructuring) was associated with greater distress in victims of sexual assault. These researchers suggested that active coping may be associated with poorer adjustment in the short term but may gain efficacy as time passes post-victimization.

Coping may influence depression likelihood in battered women as well. In one study battered women were less likely than a sample of non-battered women to use active coping

strategies such as problem-solving (Finn, 1985). This researcher predicted that the decreased use of active coping could result in greater psychological deficits and greater helplessness (Finn, 1985). In another study battered women using problem-focused coping strategies were less depressed than those using emotion focused or avoidant strategies, suggesting that problem-focused coping strategies confer psychological benefits (Clements & Sawhney, 2000). In a follow-up to this study battered women who reported greater use of coping strategies such as drug use and denial showed greater depression, hopelessness and low self-esteem (Clements, Sabourin & Spiby, 2004). In the current study, between group differences in coping were examined as well as the relationship of coping to depression, generalized anxiety, PTSD and self-esteem.

### Self-Blame

Self-blame is an important correlate of psychological functioning that is generally assessed as a form of coping (Barnett, Martinez & Keyson, 1996; Glinder & Compas, 1999; Graham & Juvonen, 1998; Janoff-Bulman, Timko, & Carlie, 1985; Meyer & Taylor, 1986; O'Neill & Kerig, 2000). Researchers typically find a relationship between high self-blame and poorer emotional adjustment (Aldwin & Revenson, 1987; Arata & Burkhart, 1998; Barnett, Martinez & Keyson, 1996; Meyer & Taylor, 1986). High self-blame may be associated with increased severity and length of depressive episodes (Beck, 1963). Self-blame may also perpetuate depressive episodes in addition to serving as a symptom of an episode (Beck, 1963).

Although most investigators emphasize the maladaptive nature of self-blame, some researchers have investigated its adaptive effects (Draucker & Stern, 2000; Gildner & Compas, 1999; Janoff-Bulman & Wortman, 1977; Janoff-Bulman, 1979; Peterson, Schwartz & Seligman, 1981; Ullman, 1996). Self-blame may be adaptive to victims of rape or other severe trauma by

reducing anxiety associated with control loss (Wortman, 1983). Thus self-blame may be associated with increases in perceived control and the psychological benefits that such increases confer (Janoff-Bulman, 1979; Miller & Porter, 1983).

### Types of Self-Blame and Victimization

Many researchers have distinguished between types of self-blame (Arata, 1999; Janoff-Bulman, 1979; Meyer & Taylor, 1986). Janoff-Bulman (1979) identified two types of self-blame. The first type is characterological self-blame in which blame is focused on the personal attributes of the individual. This is “esteem related” blame. When a rape victim blames his/her own personal attributes for his/her abuse (e.g. “I am too trusting”), he/she is utilizing characterological self-blame.

The second type of self-blame, behavioral self-blame, is action focused. This type of self-blame is focused on behaviors and actions instead of personal attributes and does not undermine self-esteem. For example, if a woman who is raped blames herself for walking on a dark street late at night, she is utilizing behavioral self-blame. Janoff-Bulman (1979) explained that behavioral self-blame may promote a rape victims’ general belief that negative outcomes are avoidable. Meyer and Taylor (1986) added societal self blame to Janoff-Bulman’s typology. This type of blame focuses on societal influences of violence, such as violence in the media and exploitation of women.

Similarly to Peterson and Seligman’s logic for causal attributions and violence, Miller and Porter have suggested that repeated victimization may result in different self-blame attributions than single episodes of victimization (1983). They postulated that discrete traumatic victimization such as a rape may provoke more behavioral rather than characterological blame

(Baker & Peterson, 1977, Miller & Porter, 1983). More chronic victimization, such as domestic violence, may elicit the use of characterological self-blame.

Miller and Porter (1983) theorized that rape victims and battered women would make similar blame attributions for a single incident of rape or battery. However, ongoing victimization may require different coping strategies. Battered women who are battered more than once may question whether or not they are at fault for the actions of their abuser. Because of this, battered women may become increasingly likely to make characterological self-blame attributions as battering continues (Andrews & Brewin, 1990; Miller & Porter, 1983). The current study examined any between group differences in the use of self-blame in victims of rape and domestic violence and also the overall contribution of self-blame to emotional status.

### Rationale

Causal attributional style, perceived control, coping and self-blame have been extensively studied in the clinical literature but less studied in the victimization literature. These variables play an important role in the development and maintenance of psychological symptoms in non-victim samples and are related to depression and anxiety in victim samples as well (Clements, Sabourin & Spiby, 2004; Janoff-Bulman, 1979). One purpose of this study was to assess whether rape victims differ from battered women on psychological symptoms following victimization or on variables associated with vulnerability to psychological symptoms.

The second purpose of this study was to explore the relationship between causal attributional style, perceived control, coping, self-blame and emotional status (depression, anxiety, PTSD and self-esteem) in victims of rape and battering. Studying victim differences in attributional style, perceived control, coping, self-blame and emotional status (depression,

anxiety, PTSD, self-esteem) is important because such differences might be specific to victimization and may suggest quite different clinical interventions.

#### Exploratory Hypothesis One

EH1: Whether or not there are between group differences in causal attributions, perceived control, coping, self-blame, depression, generalized anxiety, PTSD and self-esteem was assessed. To the extent that chronic victimization, such as domestic violence, is associated with greater depressogenic attributions, we had hypothesized that depressogenic attributions would be more predictive of depression in battered women. To the extent that more chronic abuse, such as domestic violence, is associated with low perceived control, we had hypothesized that low perceived control would be more predictive of depression in battered women. To the extent that more chronic abuse, such as domestic violence, is associated with greater use of characterological self-blame, we had hypothesized that characterological self-blame would be more predictive of depression in battered women.

#### It was hypothesized that:

H1: Internal, stable and global causal attributions about rape or abuse would be associated with greater depression, generalized anxiety and PTSD, and low self-esteem. H2: Low perceived control would be associated with higher levels of depression, generalized anxiety and PTSD and low self-esteem. High perceived control would be associated with lower levels of depression, generalized anxiety and PTSD and higher self-esteem.

H3: Victims of rape or abuse using coping skills associated with greater depression, generalized anxiety, PTSD and low self-esteem (e.g., drug use and denial) would have higher rates of depression, generalized anxiety and PTSD and lower self-esteem than victims using coping skills

associated with less depression (e.g., problem-focused and support seeking (Clements and Sawhney, 2000)).

H4: Use of behavioral self-blame would be associated with lower levels of depression, generalized anxiety and PTSD and higher self-esteem. Use of characterological self-blame would be associated with higher levels of depression, generalized anxiety and PTSD and lower self-esteem.

#### Exploratory Hypothesis Two

EH2: The joint contribution of causal attributions, perceived control, coping, and self-blame to depression, generalized anxiety, PTSD and self-esteem was explored.

### Method

#### Participants

Battered women from three North Carolina domestic violence shelters and rape victims from four North Carolina and Virginia rape crisis centers participated in the study. All rape victims were receiving individual counseling. All victims of domestic violence were attending support groups or living in the domestic violence shelter where they were solicited for participation. All participants were recruited within two months of victimization. The questionnaires were administered by the researcher or individual counselor for each victim. No one refused to participate in the study. Participants were not given any compensation for participation.

Domestic violence ( $n = 38$ ) was defined as a score of one or greater on the Conflict Tactics Scale, Physical Force subscale ( $M = 30.97$ ,  $SD = 23.21$  for domestic violence,  $M = 5.56$ ,  $SD = 11.24$  for rape). Rape ( $n = 32$ ) was defined as a “yes” to any of the three SES forced sexual intercourse questions ( $M = .79$ ,  $SD = 1.17$  for domestic violence,  $M = 1.75$ ,  $SD = .84$  for rape).

Although some participants from the rape crisis centers scored greater than 1 on the CTS, they identified their physical abuse as occurring in the context of the rape and did not self-identify as domestic violence victims. These women self-identified as rape victims and were therefore kept in the rape group.

About one third of the participants from the battered women shelters ( $n = 16$ ) scored greater than one on the SES forced sexual assault questions. These women self-identified as victims of both rape and domestic violence. (CTS  $M = 25.81$ ,  $SD = 25.80$ ; SES  $M = 2.44$ ,  $SD = .73$ ). These women were classified as victims of both rape and domestic violence for purposes of analyses. This grouping decision led to three groups of victims; a domestic violence group, a rape group and a group who had experienced both forms of violence. These groups were used as the units of analysis for this study.

### Materials

Demographics Questionnaire. The demographics questionnaire is a 10 item self-report inventory. This questionnaire assesses demographic information and abuse characteristics (e.g., severity of violence, need for medical assistance). Information concerning types of abuse and abuse duration was also assessed.

The Conflict Tactics Scale (CTS; Straus, 1979). The CTS is a 30 item, self-report measure that assesses the degree to which individuals use physical violence and verbal aggression to resolve interpersonal conflict. For the purposes of this study the 16-item physical force sub-scale was used to assess domestic violence. Participants were asked how frequently their partner engaged in 16 different physically abusive behaviors on a 0 (*never*) to 6 (*more than 20 times*) Likert scale. Higher scores indicate more physical aggression. Items include “Threw something at you” and “Scratched you”. This sub-scale has demonstrated good reliability in



previous research ( $\alpha = .91$ ; Clements and Sawhney, 2000;  $\alpha = .95$ , Clements, Sabourin and Spiby, 2004). Good reliability for the physical abuse subscale was found in this study as well ( $\alpha = .96$ ).

Control, Attributions and Expectations Questionnaire (CAEQ; Clements, 1990). The CAEQ assesses perceived control over current life events and expectations for control over future events. It also assesses causal attribution judgements for events, either internal or external, stable or unstable and global or specific. Participants made control and causal attribution judgments for their sexual assault or physical abuse incidents on a 6-point Likert scale (e.g. 1 = totally due to other people or circumstances to 6 = totally due to me).

Clements (1990) demonstrated adequate reliability for the CAEQ in non-abused samples ( $\alpha = .69$  for control perceptions about positive events and  $\alpha = .62$  for perceptions about negative events). Reliability of this scale in research in abuse samples is adequate ( $\alpha = .6$  for control over current abuse and  $\alpha = .85$  for expectations of control over future abuse; Clements & Sawhney, 2000;  $\alpha = .70$  for control over current abuse and  $\alpha = .78$  for expectations of control, Clements, Sabourin and Spiby, 2004). Adequate to good reliabilities for all scales ( $\alpha = .67$  for internal attributions,  $\alpha = .79$  for stable attributions,  $\alpha = .8$  for global attributions,  $\alpha = .82$  for current control attributions and  $\alpha = .89$  for control expectancies) was demonstrated in this study.

COPE-B (Carver, 1997). The COPE-B is a 28-item, self-report scale that measures the use of fourteen different forms of coping. COPE-B subscales include widely measured strategies such as problem-focused activities, seeking social support, self-blame and avoidance. Strategies such as humor, denial and acceptance are also included. Participants were instructed to rate how

often they used each strategy to cope with abuse or sexual assault on a 1 (I haven't been doing this at all) to 4 (I have been doing this a lot) Likert scale.

COPE-B sub-scales have shown good reliability in previous research ( $\alpha$ 's range from .54 for denial to .90 for drug use; Carver, 1997). In a previous sample of abused women Clements, Sabourin and Spiby (2004) found a range of reliabilities for COPE-B sub-scales ( $\alpha = .07$  for planning to .92 for drug use) and adequate reliability for four sub-scales including: drug use,  $\alpha = .92$ ; denial,  $\alpha = .75$ ; behavioral disengagement,  $\alpha = .66$ ; and self-blame,  $\alpha = .64$ ). The current study also found a range of reliabilities ( $\alpha$ 's range from .2 for behavioral disengagement to .9 for substance use). Seven COPE-B sub-scales demonstrated adequate reliability in this study and were used in subsequent analyses (e.g., active coping,  $\alpha = .77$ , planning coping,  $\alpha = .83$ , humor,  $\alpha = .84$ , religion,  $\alpha = .85$ , instrumental support,  $\alpha = .89$ , substance use,  $\alpha = .9$  and self-blame,  $\alpha = .76$ ).

Rosenberg's Self-Esteem Scale (ROSE; Rosenberg, 1965). The ROSE is a 10 item, self-report measure of self-esteem. Responses are ranked on 5-point Likert scale ranging from 1 = disagree to 5 = agree. The ROSE has demonstrated high reliability in domestic violence research ( $\alpha = .90$ , Mitchell & Hodson, 1983). High reliability was shown in a sample of undergraduates as well ( $\alpha = .88$ , Gray-Little & Williams, 1997). High reliability was demonstrated in this study as well ( $\alpha = .87$ ).

Attribution Rating Scale (ARS; Arata, 1999). The Attribution Rating Scale is a 25-item scale assessing the use of characterological, situational (behavioral) and societal self-blame. Participants were asked to rate each question on a 1 (completely false) to 5 (completely true) Likert scale. Questions assessing behavioral self-blame include "I did not resist enough" and "I

did not scream for help”. Questions assessing characterological self-blame include “I got what I deserved” and “I am the victim type”. Internal subscale consistency was adequate in previous research (characterological  $\alpha = .78$ , situational  $\alpha = .72$  and societal  $\alpha = .79$ ; Arata. 1999). Similar reliabilities were demonstrated in the current study (characterological  $\alpha = .85$ , behavioral  $\alpha = .70$  and societal  $\alpha = .73$ ).

Impact of Event Scale (IES; Horowitz, Wilner, Alvarez, 1979). The Impact of Event Scale is a widely used 15 item scale measuring symptoms of Post-Traumatic Stress Disorder (PTSD; Sundin & Horowitz, 2002). Participants were asked to think of either their most recent sexual assault or most recent abusive episode, and indicate how often they experienced each symptom on a 0 “not at all” to 3 “often” Likert scales. Symptoms included “I thought about it when I didn’t mean to” and “I stayed away from reminders of it”. Higher scores on the Impact of Event Scale indicate higher levels of PTSD.

Sundin and Horowitz (2002) found the intrusion scales and avoidance scales were highly reliable (intrusion  $\alpha = .86$ , avoidance  $\alpha = .80$ ). Good reliabilities for the entire scale ( $\alpha = .93$ ) and for each sub-scale (intrusion  $\alpha = .92$ , avoidance  $\alpha = .85$ ) were demonstrated in this study.

SCL-90 R (Derogatis, 1976). The SCL-90R is a widely used self-report measure of psychological symptoms (Schwarzwald, Weisenberg and Solomon, 1991). For this study only the depression and anxiety sub-scales were used. Derogatis, Rickels and Rock (1976) found internal consistency of .90 for the depression sub-scale and .85 for the anxiety sub-scale. The SCL-90R depression sub-scale is also highly correlated with the Beck Depression Inventory ( $r = .82$ ), another widely used depression measure. Both sub-scales were reliable in this study (depression  $\alpha = .92$ , anxiety  $\alpha = .91$ ).

Sexual Experiences Survey (SES; Koss & Oros, 1982). The Sexual Experiences Survey is a thirteen item survey identifying various degrees of coercion and force related to sexual contact. The survey identifies five types of sexual victimization: none, sexual contact, sexual coercion, attempted rape and rape (Layman, Gidycz & Lynn 1996). The three questions assessing rape were used in the current study. Layman, Gidycz and Lynn (1996) found that clinical interviews and other known measures of PTSD corresponded with the scale ( $r = .88$ ). The SES demonstrated good reliability for the entire scale ( $\alpha = .81$ ) and adequate reliability for the rape sub-scale ( $\alpha = .73$ ).

### Procedure

Prior to collection of data, the Institutional Review Board (IRB) of UNCW reviewed all questionnaires and procedures to ensure compliance with state and federal regulations. They also reviewed all ethical concerns for the use of human subjects in research. IRB approval was received for the current project.

Each participant completed all questionnaires individually or in small groups. Each signed informed consent prior to completing the questionnaires. Participants were told that the research project was voluntary and that they would all participate in the study anonymously.

All participants completed the demographics questionnaire, the SCL-90R (Derogatis, 1976), ROSE (Rosenberg, 1965), Revised Impact of Event Scale (Horowitz, Wilner, Alvarez, 1979), Sexual Experiences Survey (Koss & Oros, 1982), Control, Attributions and Expectations Questionnaire (CAEQ; Clements, 1990), and Conflict Tactics Scale (CTS; Straus, 1979). Victims were then asked to complete the Attribution Rating Scale (Arata, 1999) and COPE-B (Carver, 1997) questionnaires for rape and/or domestic violence. Victims who reported both

types of violence completed the Attribution Rating Scale, CAEQ and COPE-B questionnaires twice, once for each form of victimization.

## Results

### Descriptive Statistics

Descriptive statistics for domestic violence, rape and victims of both types of violence are found in Tables 1 and 2. Women in this sample reported moderate to severe levels of depression, generalized anxiety and PTSD. Victims also reported moderate to low levels of self-esteem. Means and standard deviations for emotional status variables can be found in Tables 3 through 6. These data were consistent with those found in other literature assessing emotional status in victims of violence (Clements, Sabourin and Spiby, 2004; Coid et al., 2003; Dienemann et al., 2000; Stein and Kennedy, 2000).

### Preliminary Analyses

A preliminary MANOVA was run on the CTS and the SES to examine the integrity of the grouping variable. There was a significant multivariate effect (Wilks Lambda,  $F(4, 164) = 18.41, p \leq .01$ ). Univariate analyses showed between group differences on CTS ( $F(2, 83) = 14.43, p \leq .01$ ) and SES scores ( $F(2, 83) = 18.13, p \leq .01$ ). Rape victims reported less physical violence ( $M = 5.56, SD = 11.24$ ) than battered women ( $M = 30.97, SD = 23.21$ ) and victims of both types of violence ( $M = 25.81, SD = 25.80$ ). Rape victims ( $M = 1.75, SD = 0.84$ ) and victims of both types of violence ( $M = 2.44, SD = 0.73$ ) reported more sexual violence than battered women ( $M = 0.79, SD = 1.17$ ) (All  $p$ 's  $\leq .05$ ). These data indicated that rape victims and domestic violence victims were appropriately assigned to group.

A preliminary MANOVA was conducted to examine between group differences in continuous demographic variables. There was a significant multivariate effect of group (Wilks

Lambda,  $F(4, 164) = 6.99, p \leq .01$ ). Univariate analyses revealed significant group differences in age,  $F(2, 83) = 9.08, p \leq .01$  and number of children,  $F(2, 83) = 11.7, p \leq .01$ . Post hoc analyses revealed that victims of domestic violence were significantly older than victims of rape. Victims of domestic violence and both types of assault had significantly more children than victims of rape. Those variables were used as covariates in further analyses.

Preliminary chi-square analyses were conducted to examine between group differences in categorical variables. There was no significant effect of race ( $X^2 (6, N = 86) = 12.3, p \geq .05$ ). However, there were only three Hispanic participants and one participant who self-identified as “other”. When these four participants were removed from the analysis, the chi-square was significant ( $X^2 (2, N = 82) = 8.7, p = .01$ ). There were more Caucasian participants than African-American in each of the three groups. Because this difference is consistent with national statistics, race was not used as a fixed factor in subsequent analyses (Bureau of Justice Statistics, 2004). There was no effect for religion ( $X^2 (6, N = 86) = 3.1, p \geq .05$ ). There were also no between group differences in employment status ( $X^2 (8, N = 85) = 9.2, p \geq .05$ ) or socioeconomic status ( $X^2 (6, N = 86) = 8.4, p \geq .05$ ).

Table 1

Means and Standard Deviations for Continuous Demographic Variables (N = 86)

	Domestic Violence			Rape			Both		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Age	34.9	10.3	38.0	25.2	9.4	32.0	31.8	7.4	16.0
Income	4398.1	9249.5	32.0	1113.1	12847.3	26.0	8685.8	14453.4	15.0
Length Rel.	38.0	73.0	32.0	16.0	42.0	30.0	48.0	68.0	16.0
Num. Marriages	1.3	1.5	38.0	0.3	0.7	32.0	0.9	0.9	16.0
Num. Children	2.3	2.3	38.0	0.3	0.9	32.0	1.9	1.5	16.0
Years of Ed.	12.6	2.7	38.0	13.8	1.5	31.0	14.0	2.6	16.0

Table 2

Categorical Demographic Variables for Domestic Violence, Rape and Both (N = 86)


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		Domestic Violence	Rape	Both
Race	White	23	29	10
	Black	13	2	5
	Hispanic	2	0	1
	Other	0	1	0
Religion	Christian	8	6	4
	Catholic	6	8	1
	Other	19	13	8
	None	5	5	3
Employment Status	Employed	16	19	6
	Not Empl.	22	13	10
SES	Upper	3	14	21
	Middle	4	24	4
	Lower	1	9	6

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## Exploratory Analyses

### Exploratory Hypothesis One

Five separate multivariate analyses of covariance (MANCOVAs) were conducted to assess EH1. Victim group was the independent variable in each MANCOVA. The dependent variables for the first MANCOVA were CAEQ causal attribution subscales, for the second MANCOVA were CAEQ perceived control sub-scales, for the third MANCOVA were the seven reliable COPE-B sub-scales, for the fourth MANCOVA were self-blame sub-scales, and for the fifth MANCOVA were emotional status variables (depression, generalized anxiety, PTSD and self-esteem). Age and number of children were entered as covariates in each equation. Means and standard deviations for all dependent variables by group are shown in Tables 3 through 6.

A significant multivariate effect of group on causal attributions (Wilks Lambda,  $F(6, 158) = 3.99, p \leq .01$ ) was identified in the first MANCOVA. Univariate analyses identified differences in the use of stable causal attributions,  $F(2, 83) = 7.65, p \leq .01$ ). Scheffe's contrasts demonstrated that battered women and rape victims made less stable causal attributions than victims who experienced both types of violence ( $p \leq .01$ ). There were no between group differences in internal attributions ( $F(2, 83) = 1.09, p \geq .05$ ) or global attributions ( $F(2, 83) = .79, p \geq .05$ ). There were no multivariate effects in perceived control or control expectancies in the second MANCOVA (Wilks Lambda,  $F(4, 160) = 1.24, p \geq .05$ ).

Table 3

Means and Standard Deviations for CAEQ Dimensions (N = 86)

	Domestic Violence			Rape			Both		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
CAEQ Internal	5.34	2.61	38	4.56	2.88	32	4.63	1.99	16
CAEQ Stable	5.63	2.81	38	5.28	2.92	32	8.25	2.96	16
CAEQ Global	7.67	3.11	38	6.84	3.35	32	6.63	3.03	16
Current Perceived Control	8.66	4.26	38	7.72	4.83	32	8.38	4.46	16
Control Expectancies	17.45	5.61	38	16.11	6.74	32	13.51	6.11	16

Table 4

Means and Standard Deviations for Cope-B Sub-scales (N = 86)

	Domestic Violence			Rape			Both		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Active	6.32	1.89	38	4.78	2.03	32	6.19	2.17	16
Planning	6.65	1.51	38	4.56	2.26	32	6.13	2.16	16
Humor	2.84	1.65	38	3.34	1.81	32	3.63	1.93	16
Religion	5.68	2.11	38	4.51	2.34	32	6.63	1.93	16
Instrumental Support	6.11	2.08	38	5.47	2.16	32	5.31	2.24	16
Substance Use	3.18	1.98	38	3.25	1.52	32	3.88	2.47	16
Self-Blame	4.71	2.24	38	3.94	2.02	32	5.06	2.24	16

Table 5

Means and Standard Deviations for Attribution Rating Scale Self-Blame Dimensions  
(N = 86)

	Domestic Violence			Rape			Both		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Behavioral	16.58	4.89	38	15.78	5.67	32	15.81	4.96	16
Characterological	19.76	7.57	38	15.97	6.11	32	18.63	7.84	16
Societal	25.24	6.36	38	24.47	5.92	32	24.94	8.51	16

Table 6

Means and Standard Deviations for Emotional Status Variables (N = 86)

	Domestic Violence			Rape			Both		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Depression	25.24	13.54	38	19.66	13.21	32	25.19	13.44	16
Generalized Anxiety	15.53	11.31	38	10.91	9.45	32	13.11	9.01	16
Post-Traumatic Stress Disorder	26.68	11.23	38	26.66	13.39	32	30.38	11.14	16
Self-Esteem	34.21	8.36	38	36.75	9.35	32	32.88	9.33	16

There was no significant multivariate effect of group on coping in the third MANCOVA (Wilks Lambda,  $F(14, 150) = 1.43, p \geq .05$ ). No multivariate between group differences. There was no significant multivariate effect of group on coping in the third MANCOVA (Wilks Lambda,  $F(14, 150) = 1.43, p \geq .05$ ). No multivariate between group differences in the use of behavioral, characterological or societal self-blame were identified in the fourth MANCOVA (Wilks Lambda,  $F(6, 158) = 1.04, p \geq .05$ ). No multivariate effects of group on emotional status were found in the fifth MANCOVA (Wilks Lambda,  $F(8, 156) = 1.00, p \geq .05$ ).

Because no between-group differences were found in causal attribution dimensions, perceived control, coping and self-blame, the groups were collapsed for regression analyses. The purpose of these regressions was to explore the relative contribution of causal attributions, perceived control, coping and self-blame to emotional status.

#### Preliminary Correlational Analyses

Three correlation matrices were constructed to determine the relationship of causal attributions, perceived control, coping sub-scales and self-blame to depression, generalized anxiety, PTSD and self-esteem. To control for Type One error, an alpha level of .01 was set for all correlational analyses.

The relationship of causal attributions and perceived control to emotional status was assessed in the first matrix. As can be seen in Table 7, greater internal causal attributions for victimization were associated with greater depression and generalized anxiety levels. Higher expectations for control over future victimization were associated

Table 7

Correlations Between Causal Attributions, Control and Emotional Status (N = 86)

	Depression	Anxiety	PTSD	Self-Esteem
Internal Att.	0.24*	0.22*	0.03	-0.12
Stable Att.	0.04	0.01	-0.03	-0.02
Global Att.	0.12	0.12	-0.12	-0.12
Current PC	-0.07	-0.02	-0.15	-0.10
Future PC	0.24*	-0.21	-0.19	-0.15

*Note* \*  $p < .01$ , \*\*  $p < .001$

Table 8

Correlations Between Reliable Coping Strategies and Emotional Status (N = 86)

	Depression	Anxiety	PTSD	Self-Esteem
Active	0.29**	0.23**	0.02	-0.17
Planning	0.25*	0.23*	0.05	-0.15
Humor	0.17	0.16	0.19	-0.13
Religion	-0.03	-0.06	0.02	0.08
Instr. Support	0.16	0.13	0.07	-0.03
Substance Use	0.26*	0.33**	0.29**	-0.26*
Self-Blame	0.53**	0.53**	0.25*	-0.57**

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*Note* \*  $p < .01$ , \*\*  $p < .001$



Table 9

Correlations Between Type of Self-Blame and Emotional Status (N = 86)

	Depression	Anxiety	PTSD	Self-Esteem
Characterological	0.54**	0.51**	0.14	-0.59**
Behavioral	0.43**	0.45**	0.24*	-0.57**
Societal	0.39**	0.41**	0.17	-0.33**

*Note* \*  $p < .01$ , \*\*  $p < .001$

with less depression. Attributional and control style dimensions were not associated with PTSD or self-esteem.

The relationship of reliable COPE-B subscales to emotional status was assessed in the second correlation matrix. All correlations can be seen in Table 8. Greater active coping, planning coping, substance use, and self-blame were associated with greater depression. Greater active coping, planning coping, substance use, and self-blame were associated with greater generalized anxiety. Greater substance use and self-blame were associated with greater PTSD and lower self-esteem.

The relationship of self-blame to emotional status was assessed in the third matrix. As can be seen in Table 9, greater use of characterological, behavioral and societal self-blame were associated with greater depression and generalized anxiety levels and low self-esteem. Greater use of behavioral self-blame was also associated with greater levels of PTSD.

### Hypothesis One

Two hierarchical regressions were conducted to assess Hypothesis One. Depression was the dependent variable in the first equation and generalized anxiety was the dependent variable in the second regression. PTSD and self-esteem were not used because they were not correlated with causal attributions. Age and number of children were entered on the first step as covariates in each equation and internal causal attributions were added on the second step. Internal causal attributions predicted a significant amount of the variance in reports of depression and generalized anxiety. Regression analyses can be seen in Table 10.

### Hypothesis Two

One hierarchical regression was conducted to assess hypothesis two because depression was the only variable associated with perceived control. Age and number of children were

entered on the first step of the regression and control expectancies were entered on the second. Greater perceived control over future victimization was a significant determinant of lower depression scores. Regression analysis for hypothesis two can be seen in Table 11.

### Hypothesis Three

Four hierarchical regressions were conducted to assess the contribution of correlated coping strategies to depression, anxiety, PTSD and self-esteem. In the first equation depression was the dependent variable. Age and number of children were entered on the first step of the regression and active coping, planning, substance use and self-blame were entered on the second step. Greater self-blame coping predicted a significant amount of variance in reports of higher depression levels. Regression analyses for depression can be seen in Table 12.

The second hierarchical regression was conducted to assess the contribution of coping to generalized anxiety. Age and number of children were entered on the first step of the regression and active coping, planning, substance use and self-blame on the second. As can be in Table 13 self-blame coping predicted a significant amount of the variance in reports of anxiety.

A third hierarchical regression was used to identify coping strategies that predicted significant variance in Post-Traumatic Stress Disorder in victims of violence. Age and number of children were entered on the first step and substance use and self-blame on the second. Greater substance use predicted a significant amount of variance in reports of greater PTSD. Regression analyses can be seen in Table 14.

Table 10

Hierarchical Regression Analysis of Causal Attributions to Emotional Status (N = 86)

<u>Depression</u>					
Variable	<u>R<sup>2</sup></u>	<u>ΔR<sup>2</sup></u>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.01	0.01			
Age			0.02	0.02	0.13
Number of Children			-0.35	0.86	-0.05
Step 2	0.08*	0.06			
CAEQ Internal			1.32	0.56	0.26*
<u>Anxiety</u>					
Variable	<u>R<sup>2</sup></u>	<u>ΔR<sup>2</sup></u>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.02	0.02			
Age			0.15	0.13	0.15
Number of Children			-0.39	0.65	-0.07
Step 2	0.08*	0.06			
CAEQ Internal			0.99	0.43	0.25*

*Note* \*  $p < .05$ , \*\*  $p < .01$

Table 11

Hierarchical Regression Analysis of Perceived Control Dimensions and Emotional Status (N = 86)

<u>Depression</u>					
Variable	<u>R</u> <sup>2</sup>	<u>ΔR</u> <sup>2</sup>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.01	0.01			
Age			0.17	0.16	0.13
Number of Children			-0.35	0.86	-0.05
Step 2	0.08*	0.07			
Control Expectancies			-0.56	0.23	-0.26*

*Note* \*  $p < .05$

Finally, a fourth hierarchical regression was used to assess the contribution of coping strategies to self-esteem. Age and number of children were entered on the first step of the regression and substance use and self-blame on the second. As can be seen in Table 15, greater self-blame coping was the only significant predictor of lower self-esteem in victims of violence.

#### Hypothesis Four

Correlational analyses indicated that characterological, behavioral and societal self-blame were all associated with greater levels of depression and generalized anxiety and lower levels of self-esteem. Greater PTSD was associated with greater use of behavioral self-blame. Four hierarchical regressions were used to assess the relative contribution of self-blame to depression, anxiety, PTSD and self-esteem respectively. In

the first hierarchical regression age and number of children were entered on the first step and all types of self-blame on the second step. Greater characterological self-blame was a significant predictor of greater depression. Regression analyses can be seen in Table 16. The second hierarchical regression was used to determine the contribution of self-blame to generalized anxiety.

Age and number of children were entered on the first step and all types of self-blame on the second. Greater characterological self-blame was also the only significant predictor of greater generalized anxiety. Regression analyses can be seen in Table 17.

Table 12

Hierarchical Regression Analysis of Coping on Emotional Status (N = 86)

<u>Depression</u>					
Variable	<u>R</u> <sup>2</sup>	<u>ΔR</u> <sup>2</sup>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.01	0.01			
Age			0.17	0.16	0.13
Number of Children			-0.35	0.86	-0.05
Step 2	0.33**	0.32			
Active Coping			1.55	0.83	0.24
Planning Coping			-0.21	0.87	-0.03
Substance Use			0.89	0.69	0.13
Self-Blame			2.79	0.64	0.45**

*Note* \*  $p < .05$ , \*\*  $p < .01$

Table 13

Hierarchical Regression Analysis of Coping on Emotional Status (N = 86)

<u>Anxiety</u>					
Variable	<u>R</u> <sup>2</sup>	<u>ΔR</u> <sup>2</sup>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.02	0.02			
Age			0.15	0.13	0.15
Number of Children			-0.39	0.65	-0.07
Step 2	0.34**	0.32			
Active Coping			0.72	0.63	0.15
Planning Coping			0.12	0.67	0.03
Substance Use			1.03	0.54	0.19
Self-Blame			2.05	0.49	0.43**

*Note* \*  $p < .05$ , \*\*  $p < .01$



Table 14

Hierarchical Regression Analysis of Coping on Emotional Status (N = 86)

<u>PTSD</u>					
Variable	<u>R<sup>2</sup></u>	<u>ΔR<sup>2</sup></u>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.01	0.01			
Age			-0.02	0.15	-0.02
Number of Children			-0.31	0.76	-0.05
Step 2	0.12*	0.11			
Substance Use			1.48	0.69	0.24*
Self-Blame			0.98	0.61	0.18

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*Note* \*  $p < .05$ , \*\*  $p < .01$

Table 15

Hierarchical Regression Analysis of Coping on Emotional Status (N = 86)

<u>Self-Esteem</u>					
Variable	<u>R</u> <sup>2</sup>	<u>ΔR</u> <sup>2</sup>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.04	0.04			
Age			-0.17	0.11	-0.19
Number of Children			0.78	0.56	0.17
Step 2	0.34**	0.31			
Substance Use			-0.31	0.45	-0.07
Self-Blame			-2.18	0.39	-0.53**

Note \*  $p < .05$ , \*\*  $p < .01$

A hierarchical regression was used to determine if behavioral self-blame was a significant predictor of PTSD in victims of violence. Age and number of children were entered on the first step and behavioral self-blame on the second. Greater use of behavioral self-blame was a significant predictor of higher PTSD. Regression analyses can be seen in Table 18. Finally, a hierarchical regression was used to determine if greater self-blame was a significant predictor of lower self-esteem. Age and number of children were entered on the first step of the regression and all types of self-blame on the second. Greater use of characterological self-blame was the only significant predictor of lower self-esteem. Regression analyses can be seen in Table 19.

#### Exploratory Hypothesis Two

Four hierarchical regressions were conducted to determine the relative contribution of attributional style, perceived control, coping and self-blame to emotional status. The first hierarchical regression was used to identify variables that predicted depression. Age and number of children were entered on the first step and internal attributions, control expectancies, self-blame coping and characterological self-blame were entered on the second. Characterological self-blame ( $\beta = .29$ ) and self-blame coping ( $\beta = .33$ ) remained important determinants of greater depression ( $\Delta R^2 = .38, p \leq .01$ ). Internal attributions and control expectancies no longer predicted depression.

The second hierarchical regression was used to determine the relative contribution of internal attributions, coping and self-blame to generalized anxiety. Age and number of children were entered on the first step and internal attributions, self-blame coping and characterological self-blame were entered on the second step.

Table 16

Hierarchical Regression Analysis of Attribution Rating Scale Blame Sub-Types on Depression

(N = 86)

Variable	<u>R</u> <sup>2</sup>	<u>ΔR</u> <sup>2</sup>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.01	0.01			
Age			0.17	0.16	0.13
Number of Children			-0.35	0.86	-0.05
Step 2	0.31**	0.29			
Characterological			0.86	0.27	0.48**
Behavioral			-0.08	0.38	-0.01
Societal			0.35	0.22	0.17

*Note* \*  $p < .05$ , \*\*  $p < .01$

Table 17

Hierarchical Regression Analysis of Attribution Rating Scale Blame Sub-Types on Anxiety (N = 86)

Variable	<u>R<sup>2</sup></u>	<u>ΔR<sup>2</sup></u>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.02	0.02			
Age			0.15	0.13	0.15
Number of Children			-0.39	0.65	-0.07
Step 2	0.29*	0.27			
Characterological			0.47	0.21	0.34*
Behavioral			0.19	0.29	0.11
Societal			0.34	0.17	0.21

*Note* \*  $p < .05$ , \*\*  $p < .01$

Table 18

Hierarchical Regression Analysis of Attribution Rating Scale Blame Sub-Types on PTSD (N = 86)

Variable	<u>R</u> <sup>2</sup>	<u>ΔR</u> <sup>2</sup>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.01	0.01			
Age			-0.01	0.15	-0.02
Number of Children			-0.31	0.76	-0.05
Step 2	0.05*	0.05			
Behavioral			0.52	0.26	0.22*

Note \*  $p < .05$ , \*\*  $p < .01$

Table 19

Hierarchical Regression Analysis of Attribution Rating Scale Blame Sub-Types on Self-Esteem

(N = 86)

Variable	<u>R</u> <sup>2</sup>	<u>ΔR</u> <sup>2</sup>	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1	0.04	0.04			
Age			-0.17	0.11	-0.19
Number of Children			0.78	0.56	0.17
Step 2	0.39**	0.35			
Characterological			-0.51	0.17	-0.43**
Behavioral			-0.35	0.24	-0.19
Societal			-0.07	0.14	-0.05

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*Note* \*  $p < .05$ , \*\*  $p < .01$

Characterological self-blame ( $\beta = .27$ ) and self-blame coping ( $\beta = .37$ ) remained the only significant predictors of generalized anxiety ( $\Delta R^2 = .34, p < .01$ ).

The third hierarchical regression was used to determine the relative contribution of coping and self-blame to PTSD. Age and number of children were entered on the first step of the regression and substance use coping and behavioral self-blame on the second. Substance use coping ( $\beta = .27$ ) was the only predictor of a significant amount of variance in reports of PTSD ( $\Delta R^2 = .12, p < .05$ ).

The final hierarchical regression was used to determine the relative contribution of coping and self-blame to self-esteem in victims of violence. Age and number of children were entered on the first step and self-blame coping and characterological self-blame were entered on the second. Characterological self-blame ( $\beta = -.41$ ) and self-blame coping ( $\beta = -.34$ ) both remained significant predictors of low self-esteem ( $\Delta R^2 = .41, p \leq .01$ ).

## Discussion

These results demonstrate that victims of rape and domestic violence are similar on many demographic and psychological variables. Demographically victims of both types of violence reported similarly low income and educational backgrounds. Battered women and rape victims did not differ in religion, number of marriages or length of current relationship.

Although statistically there were no between group differences in race, there were very few Hispanic or “other” participants. Once Hispanics and “others” were removed from the groups there were more Caucasian women in both the rape and domestic violence groups than African-American. Although these differences in race were consistent with national data, there were far fewer African-American women in the rape group than would be expected. In the U.S. population 27.6% of rape victims are African American (Bureau of Justice Statistics, 2004). The



Rape Crisis Center of Coastal Horizons Center, Inc. reported 27% of their clients in the year 2003 to 2004 as African-American. The fact that less than 10 percent of this sample's rape victims were African-American suggests that these victims may not be receiving follow up services at the same rates as Caucasian victims directly after an assault. It may be important for rape crisis centers to maintain better contact with African-American victims directly after a rape. It is also possible that African-American victims did not seek counseling services after their rapes. These group differences may limit the generalizability of the current results to African-American victims.

Similarly, about one third of the sample of domestic violence victims was African-American. The National Crime Victimization Survey found that 22% of physical assault victims were African-American (Bureau of Justice Statistics, 2004). Thus African-American victims of domestic violence may be overrepresented in this sample. It is possible that services afforded African-American women at the shelter may result in utilization patterns greater than those seen with rape victims. It may be important to assess the process resulting in greater African-American women's participation at domestic violence shelters. Greater knowledge of this process may inform rape crisis centers about what they might do to ensure better access to services for African-American women.

The demographic data on income are consistent with previous research showing that low income is a risk factor for violence. Walby and Allen (2004) found that women in households with an income of less than 18,000 a year were three times more likely to experience domestic violence and sexual assault than women living in households with an annual income of more than 36,000. This lends greater weight to growing evidence that suggests that income level is associated with increased risk status for interpersonal violence (Clements & Sawhney, 2000;

Bureau of Justice Statistics, 2004). This finding implies that clinical interventions designed to reduce assault be focused on low income groups. Alternatively social programs designed to ensure income equity might result in reduced violence.

Battered women were significantly older than rape victims and reported having more children. This is potentially significant because research suggests that emotional status, coping and attributional style may differ as a function of age (Bebbington et. al., 2003; Stordal, Mykletun & Dahl, 2003). The age differences found were consistent with those seen in the extant rape and domestic violence literatures (Clements & Sawhney, 2000; Uniform Crime Reports, 2002). Rape is more common between the ages of eighteen and twenty-four (Uniform Crime Reports, 2002). Victims of domestic violence in shelter tend to be older and have a history of continuing abuse (Clements & Sawhney, 2000). Although we recognized that these may be true population differences, age and number of children were used as covariates in all analyses to ensure that any differences in emotional status, attributions and coping were not due to the difference in age between battered women and rape victims.

#### Exploratory Hypothesis One: Between Group Differences

There were no between group differences in emotional status, including levels of depression, anxiety, PTSD and self-esteem. All three groups exhibited clinically significant levels of depression and anxiety (Derogatis, Rickles & Rock, 1976; Moffett & Radenhausen, 1990). All victims exhibited levels of PTSD consistent with a clinical diagnosis of the disorder (Horowitz, Wilner & Alvarz, 1979) and all victims exhibited moderate to high self-esteem consistent with control samples (Gray-Little & Williams, 1997).

Previous researchers have found that victims of rape and domestic violence exhibit high levels of depression and anxiety following an assault (Frazier, 2000; Kessler et al., 1999; Sackett

& Saunders, 1999; Stein & Kennedy, 2001). However; these groups have always been measured separately and the results discussed in terms of each type of assault. No researcher has ever directly compared victims of rape and domestic violence to determine if the levels of depression and anxiety exhibited by these groups were different.

The lack of between group differences may have reflected the fact that depression and anxiety symptoms assessed were exhibited at such high levels in all groups. There may not have been enough variation in symptom endorsement to detect between-group differences. Although not assessed in this study it is also possible that different types of victims may be endorsing different clusters of symptoms while their overall levels remain similar. This indeed is the logic behind researchers examining specific sequelae of victimization such as Rape Trauma Syndrome and Battered Women's Syndrome.

Rape Trauma Syndrome was developed to explain the behavioral, somatic and psychological effects of rape (Burgess and Holmstrom, 1974). These symptoms include muscle tension, intense fear, self-blame, psychosexual dysfunction and anger (Burgess & Holmstrom, 1974). Very little empirical research on Rape Trauma Syndrome exists, however; recent theorists have described "rape-induced Post-Traumatic Stress Disorder" to converge the scientific evidence about the response to general trauma with information about women's response to sexual assault (Meadows & Foa, 1998). No evidence exists to distinguish rape victims who develop rape trauma syndrome from those victims who do not. There is also no evidence supporting the notion that rape trauma syndrome differs from non-rape associated PTSD symptoms.

Battered Women's Syndrome is another such syndrome, characterized by self-blame, the inability to place responsibility for the violence with the abuser, intense fear and an irrational

belief that the abuser is omniscient (Walker, 1992; Rubenstein, 1999). Although the criteria for Battered Women's Syndrome were based on anecdotal observations by Lenore Walker (1977), there is little empirical research supporting the existence of such a syndrome. Walter Gleason (1993) found that battered women exhibited major depression, PTSD, psychosexual dysfunction and generalized anxiety. Although Gleason found that physical abuse had a negative effect on women, he did not find that a differential diagnosis of Battered Woman's Syndrome was warranted. He concluded that the clusters of symptoms exhibited by these women could be diagnosed as disorders already existing in the DSM-IV-TR, such as depression and PTSD, without making a diagnosis of Battered Women's Syndrome (Gleason, 1993).

The current data suggest that rape victims are similar to battered women in overall levels of depression and anxiety. Thus designations such as "Rape Trauma Syndrome" and "Battered Woman's Syndrome" may be redundant. No previous research has directly compared victims of sexual and physical violence to differentiate symptomology. The current data lend weight to the small body of research suggesting that both of these syndromes are actually forms of PTSD (Dixon & Dixon, 2003; Dutton, 1993/1996; Vandervoort & Rokach, 2003). In fact, because these syndromes are not in the DSM-IV-TR, legal professionals often promote PTSD as a "viable alternative" to using either syndrome in legal proceedings (Dixon & Dixon, 2003; Dutton, 1996).

These similar psychological profiles suggest that clinical interventions designed to address depression, anxiety, PTSD and self-esteem post-victimization may not have to be tailored to specific type of violence. Initial mental health services for these victims may include similar interventions designed to decrease symptoms and avoid the development of more severe pathology. Similarly, interventions to increase self-esteem may not have to be tailored to a

specific type of abuse. This is inconsistent with previous theorists who tailored interventions to specific types of abuse (Naugle, Resnick, Gray & Acierno, 2002; Petrak & Hedge, 2004).

This lack of between group differences in emotional status may also have important public policy implications. Agencies typically work solely with victims of either domestic violence or rape. There are, for example, 1,506 rape crisis centers and 1,600 domestic violence shelters active in the United States (VAASA, 2004). These agencies often compete for federal and state funds. Domestic violence shelters and rape crisis centers were awarded grants of over 20 million dollars in the last fiscal year and the Victims of Crime Act (VOCA) gives nearly 1.27 billion dollars to victim service organizations around the country (Bureau of Justice Statistics, 2004). If victims of rape and domestic violence respond emotionally in similar ways, they may be able to utilize the same services. Mental health services for these victims may be able to be coordinated by domestic violence shelters and rape crisis centers and could be more cost effective. Further research directed at between group differences in the endorsement of specific symptoms would address this possibility.

### Causal Attributions

Peterson and Seligman (1983) posited that repeated victimization such as domestic violence may increase internal, stable and global causal attributions. This would render individuals who experience repeated violence more prone to depression than individuals experiencing acute incidents. Using this logic we had hypothesized that battered women, who experience more chronic abuse than rape victims, would be more likely to make depressogenic attributions and thus be more depressed.

In the current study no between-group differences in internal and global causal attributions were found even though domestic violence did in fact occur more chronically. Both

groups reported moderate levels of internal and global causal attributions. This finding does not support Peterson and Seligman's (1983) theory that chronic forms of victimization will result in greater use of internal and global attributions.

There were between group differences in the use of stable causal attributions. Battered women and rape victims made less stable causal attributions than victims of both types of violence. This suggests that victims of both types of violence believed that the causes of their assaults were more stable over time than victims of one type of assault. This difference may illustrate an additive effect of different types of violence on victims. This again does not support the original position of Peterson and Seligman (1983) who posited that chronic abuse of diverse types would increase the use of stable attributions.

Further research comparing victims is needed to establish the extent to which different types of violence, and not just repeated violence, is associated with stable causal attributions. This is important because the group of victims experiencing both rape and domestic violence may be more vulnerable to depression to the extent that stable attributions make adjustment more difficult (Alloy, Lipman & Abramson, 1992; Alloy, Just & Panzerella, 1997). Previous research shows that anywhere from 30% to 45% of victims of domestic violence also experience rape (Campbell & Soeken, 1999). In the current study, all victims who experienced both types of violence were collected at domestic violence shelters. These victims may confer a very different vulnerability to depression and may need specific clinical interventions designed to reduce stable attributions.

### Perceived Control

There were no between group differences in perceived control. All victims reported low levels of perceived control over current abuse or assault and high levels of perceived control over

future victimization. Previous researchers have found high levels of control expectancies for future abuse in battered women (Clements & Sawhney, 2000; Clements, Sabourin & Spiby, 2004). These researchers also found that their samples of battered women did not report hopelessness. They concluded that this lack of hopelessness was due to participants' high expectations of control over future abuse.

It is important to note that all women were receiving services for their assault. Studies have found that only about 10% of domestic violence victims would seek services at a shelter for abuse (Burnett & Adler, 2004) and less than 5% of rape victims seek services for their assault (Koss & Harvey, 1991). It is possible that service seeking women already developed high perceptions of control over future victimization just by the act of accessing services. Future studies comparing treatment seeking victims to non-treatment seeking victims would be important to demonstrate whether perceived control over assault differs as a function of the decision to access services.

It is also possible that victims who have low perceived control are more likely to seek services for their victimization. These victims may develop high perceived control over future victimization through the services they receive. Longitudinal studies assessing perceived control more proximally to victimization might help clarify whether acute services are associated with changes in perceived control over victimization.

The lack of differences may have important clinical implications for interventions post-victimization. High perceived control has been related to better adjustment post-victimization (Clements & Sawhney, 2001). The domestic violence literature emphasizes empowering women (Bennett, Riger, Schewe, Howards & Wasco, 2004). The rape literature emphasizes symptom reduction and increasing perceived control (Naugle, Resnick, Gray & Acierno, 2002). Our data

suggest that such interventions may not have to be tailored to victim type. Increases in perceived control over future victimization of any type may be the critical factor in reducing symptoms of depression.

### Coping

There was no between group differences difference in types of coping strategies used. Regardless of type of abuse, victims used similar coping strategies. All victims used moderate amounts of active coping, planning, positive reframing, acceptance, religion, emotional support, instrumental support, self-distraction, venting and self-blame. All victims used low amounts of humor, denial, substance use and behavioral disengagement. It is once again important to note that all women were receiving services for their assault. Future studies comparing treatment seeking victims to non-treatment seeking victims would be important to demonstrate whether coping differs as a function of the decision to access services.

### Self-Blame

Victims of both rape and domestic violence made self-blame attributions consistent with those seen in other victim surveys (Arata & Burkhart, 1998; Barnett, Martinez & Keyson, 1996; Frazier, 1990, Meyer & Taylor, 1986). Much like the current study, Arata and Burkhart (1998) and Frazier (1990) found that rape victims on average endorsed the word “neutral” when asked about characterological, behavioral and societal attributions of blame. Similarly, Barnett, Martinez and Keyson (1996) found the battered women made neutral attributions of overall blame for their abuse as well. One characteristic of these studies is that they all used self-report measures of self-blame, as was the case in this study.

In contrast Janoff-Bulman (1979) found that victims in her sample blamed themselves at least in part for their assault. Janoff-Bulman used an interview protocol with counselors of rape



victims to elicit blame attributions. More of her participants made behavioral self-blame attributions than characterological attributions. Thus interview data appears to elicit different blame attributions than self-report measures. It is possible that Janoff-Bulman's participants felt freer to blame themselves for their assaults within the context of an interview.

Further research directly comparing interview techniques with self-report measures may help identify what protocols are most useful in assessing blame after victimization. It may be that during a clinical interview, a researcher may be able to develop greater rapport with the client. These clients may have been more likely to report self-blame in interview situations than they are on survey measures.

### Regression Analyses

Because there were no between groups differences on any dependent variables and most independent variables, groups were collapsed to allow for an exploration of the relationship between causal attributions, perceived control, coping and self-blame and correlated emotional status variables.

### Causal Attributions

Greater internal causal attributions were the only attributional predictor of greater depression and generalized anxiety. Previous research has found that internal attributions are predictive of depressive symptoms in clinical samples (Pinto & Francis, 1993). Stable and global causal attributions, and to some extent internal attributions are distinct predictors of depression in other studies (Alloy, Lipman & Abramson, 1992; Joiner, 2001). The current findings suggest that internal attributions for victimization may be more important predictors of depression and anxiety than stable or global attributions. It may be important to focus clinical interventions

designed to reduce depression and anxiety on attributing cause for violence to external sources and not internal characteristics.

It is also possible that victims making internal attributions are more likely to access services for their assaults. Further research comparing groups who access services and those who do not to investigate differences in attributional style are needed to assess this possibility. To my knowledge there are no studies assessing this theory. It may be important to determine whether greater internal attributions for victimization are associated with the decision to access services. If this is true than agencies promoting interventions with victims might address such attributions at first point of contact with victims.

It is also possible that depressed and anxious victims may be more likely to make internal attributions because of their emotional status (Clements & Sawhney, 2000). A cross-sectional design does not allow us to assess whether victims' attributions caused depression and anxiety or whether depression and anxiety caused the attributions. Longitudinal research on causal attributions and depression and anxiety is needed to determine the direction of this relationship. Although it may not be possible to measure causal attributions and emotional status before a woman is victimized, it may be possible to assess whether interventions targeting internal attributions in victims result in decreased depression.

### Perceived Control

Greater perceived control over future violence was the only predictor of lower levels of depression following victimization. This finding is consistent with previous research finding that higher perceived control is predictive of lower levels of depression in non-victim and victim populations (Bohachick, Taylor, Sereika, Reeder, & Anton, 2002; Clements, Sabourin & Spiby, 2004; Frazier, 2000; Osowiecki & Compas, 1999).

Janoff-Bulman (1979) theorized that victims of sexual assault who blamed their behaviors for their rape may have felt they controlled the possibility of future assaults and therefore exhibited less depression. Similarly, Clements, Sabourin and Spiby (2004) found that battered women who reported high levels of perceived control over future events of violence exhibited less depression. Janoff-Bulman described this phenomenon as control maintenance and concluded that individuals who blame victimization on their own behaviors have high perceived control over future victimization. Although Janoff- Bulman theorized that greater behavioral self-blame would be associated with higher perceived control, she did not measure perceived control. Our data provide support for Janoff-Bulman's logic in that they suggest that higher perceived control is associated with less depression.

It appears that perceived control over future events of violence is more important in predicting depression than perceived control over current victimization. It may be important to focus on increasing perceived control over future incidents of violence in order to alleviate depressive symptoms. Typically therapy with victims of violence involves addressing perceived control over current victimization (Naugle, Resnick, Gray & Acierno, 2002). These data suggest that focusing on current level of perceived control about a recent assault may not be useful in alleviating increased depressive symptoms.

It would be interesting to assess whether perceived control over victimization changes as a function of receiving services. It is possible that control expectations change as a function of receiving services while current control attributions remain stable. Women who receive services emphasizing increased coping ability may expect to have greater capacity to control future victimization even as their current perceived control remains unchanged. A cross-sectional design cannot assess whether perceived control caused depression or whether depression caused

perceived control. Research assessing victims control perception and depressive symptoms as they access services would be need to address this possibility.

### Coping

Coping was a significant determinant of depression, generalized anxiety, PTSD and self-esteem. Greater use of self-blame coping was the sole predictor of greater levels of depression, anxiety and lower self-esteem. This finding is consistent with other research finding that greater self-blame is associated with greater depression (Boelen, Van-den-Bout & Van-den-Hout, 2003; Clements, Sabourin & Spiby, 2004) and anxiety (Ding & Shi, 2002; Garnefski, Legerstee, Kraaij, Van-den-Kommer & Teerds, 2002).

These data suggest that self-blame coping may be an important variable to address in clinical interventions designed to reduce depression and anxiety and to increase self-esteem following assault. Interventions focusing on reducing the amount of generalized self-blame used may be important in a clinical setting. Reducing self-blame symptoms may cause a reduction in depressive symptoms and increase self-esteem.

It may also be the case that victims who are depressed, anxious or who have low self-esteem are more prone to use self-blame coping. Previous research by Billings and Moos (1984) found that depressed patients used less problem focused coping than non-depressed patients and the victims in this study may be utilizing self-blame as a coping technique because of their increased depression levels. Further research to determine the causal pathway of self-blame to depression is important to design specific clinical interventions at reducing self-blame and depression.

Greater substance use coping was the only significant predictor of PTSD. Victims who used alcohol or drugs following their assault exhibited greater symptoms of Post-traumatic stress

disorder. This finding is consistent with previous literature showing similar relationships between PTSD and substance abuse in rape victims (Ullman & Brecklin, 2003).

It is possible that victims experiencing symptoms of PTSD may be more prone to use substances after an assault. Research has found that individuals diagnosed with PTSD showed increased cravings and substance abuse when exposed to traumatic cues (Coffey et al., 2002). Interventions designed to reduce substance abuse following an assault may lead to decreased amounts of PTSD in victims of violence or interventions to decrease PTSD may result in a decrease in the use of alcohol and drugs post-assault. Research is needed to identify the causal pathway of substance abuse and its relation to symptoms of PTSD.

### Self-Blame

In this study self-blame was measured in three categories. Characterological, or esteem-related blame, was the first type. Behavioral, or blame associated with specific behaviors, was the second type and societal blame, blame of others or of societal factors, was the last type. All three types of blame were associated with increased depression and generalized anxiety and decreased self-esteem. Greater behavioral self-blame was associated with greater PTSD. Previous research has established a relationship between greater self-blame and poorer adjustment, including increased depression and anxiety (Aldwin & Revenson, 1987; Arata, 1999; Arata & Burkhart, 1998; Barnett, Martinez & Keyson, 1996; Janoff-Bulman, 1979).

Greater characterological self-blame was the only significant predictor of greater depression, greater generalized anxiety and lower self-esteem in victims of violence. This finding is consistent with previous research. Arata and Burkhart (1998) found that sexual assault victims who reported psychological symptoms were more likely to engage in characterological self-

blame. Janoff-Bulman (1979) found that depressed participants reported more characterological self-blame than non-depressed participants.

Characterological self-blame seems to be particularly problematic for emotional status in victims of violence. It appears that victims who blame personal traits or characteristics report greater depression and anxiety and lower self-esteem. Clinical interventions designed to focus the blame on external factors and not personal characteristics or flaws may help reduce depression and anxiety, and increase self-esteem following victimization.

It is also possible that victims of violence who are already depressed and anxious or exhibiting low self-esteem may be more prone to make characterological blame attributions for their assault. In this case, reducing psychological symptoms may result in a decreased use of characterological self-blame. Future research is needed to establish the causal direction of the association between characterological blame and depression.

Greater use of behavioral self-blame was the only significant predictor of greater PTSD. It is also possible that victims who exhibit PTSD may be more likely to blame their behavior for the assault. Establishing the causal pathway of behavioral self-blame and PTSD is needed in order to design clinical interventions to reduce PTSD.

#### The Joint Contribution of Causal Attributions, Perceived Control, Coping and Self-Blame

Characterological self-blame and self-blame coping were the only significant predictors of greater depression and lower self-esteem that remained when all predictors were used. Internal attributions and control expectancies no longer predicted depression. Self-blame coping remained the only significant predictor of greater generalized anxiety. Substance use coping was the only significant predictor of PTSD once all predictors were used in the regression.

These data suggest that self-blame may be a more important contributor to mood state post-victimization than causal attributions, perceived control or coping. Characterological self-blame, or esteem-related blame, may be particularly problematic. These findings are important because interventions focused on the use of self-blame may be more important in alleviating symptoms of depression, anxiety and low self-esteem in victims of violence than interventions targeting perceived control or causal attributions. Interventions specific to characterological self-blame, or blame of individual characteristics or traits, may be particularly important and specific to depression and low self-esteem.

### Limitations

The use of self-report questionnaires in this study could limit generalizability. Developing rapport with each participant using an interview approach may result in more accurate data. It is also the case that rape victims differed from domestic violence victims on important demographic indicators. While these differences reflect the overall population of victims, it may make comparisons more difficult.

All victims were assessed within two months of assault. It may be useful to assess these victims for changes in emotional status, perceived control, self-blame and coping at many different times following abuse. Victims assessed immediately post assault may differ substantially from those assessed in the following weeks.

The fact that all women in this study were accessing services also limits generalizability. These participants were all receiving either individual or group counseling for their specific type of abuse. It may be useful to seek groups of victims who did not seek services in a shelter or at a counseling center to compare their emotional status to those who do seek services.

## Conclusions

Self-blame appears to be the most important predictor of mood-state in victims of violence. There are no differences in emotional status of victims of different types of violence so clinical interventions can be generalized to women experiencing different forms of physical and sexual abuse and assault.

Future research using larger samples of victims is needed to determine if they truly differ on psychological variables. Because the third group of victims who experienced both types of violence emerged the samples were smaller than desired. It would also be beneficial to collect samples closer to the actual abuse and possibly track the changes in emotional status as the victims receive counseling services for their victimization. A longitudinal study of the changes of emotional status in these victims is needed. It would also be beneficial to collect a sample of victims of rape and domestic violence that did not choose to seek counseling services after their assault to assess the differences in emotional status from the victims who did receive treatment.



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## APPENDIX

Subject ID# \_\_\_\_\_

### Demographics/History Questionnaire DV/R

Please answer the following questions by either filling in the appropriate information or checking the appropriate response.

- 1) Age \_\_\_\_\_
- 2) Race/Ethnicity \_\_\_\_\_
- 3) Religion \_\_\_\_\_
- 4) Employment status:  
employed \_\_\_\_\_  
unemployed \_\_\_\_\_
- 5) Current independent household income \_\_\_\_\_
- 6) Where do you get most of your income?  
Abuser \_\_\_\_\_  
Government assistance \_\_\_\_\_  
Your job \_\_\_\_\_  
Your family \_\_\_\_\_  
Friends \_\_\_\_\_
- 7) Current socioeconomic status:  
upper \_\_\_\_\_  
middle \_\_\_\_\_  
lower \_\_\_\_\_
- 8) Marital status (at time of abuse):  
dating \_\_\_\_\_  
married \_\_\_\_\_  
separated or divorced \_\_\_\_\_  
unmarried but living together \_\_\_\_\_
- 9) Length of relationship (in months) \_\_\_\_\_
- 10) Number of marriages \_\_\_\_\_
- 11) Number of children \_\_\_\_\_
- 12) History of depression \_\_\_\_\_  
anxiety \_\_\_\_\_
- 13) Years of education \_\_\_\_\_
- 14) Have you experienced physical violence (not including rape)? \_\_\_\_\_
- 15) If yes, how many years did you experience physical violence (not including rape)? \_\_\_\_\_
- 16) If yes, how many incidents of physical violence have you experienced?  
One time \_\_\_\_\_ Six to ten times \_\_\_\_\_  
Two times \_\_\_\_\_ Eleven to fifteen times \_\_\_\_\_



- Three to five times \_\_\_\_\_ More than fifteen times \_\_\_\_\_
- 17) If yes, when did the physical violence begin?  
 First year of the relationship \_\_\_\_\_  
 After the first year of the relationship \_\_\_\_\_
- 18) If yes who was your abuser?  
 Husband \_\_\_\_\_  
 Boyfriend \_\_\_\_\_  
 Other \_\_\_\_\_
- 19) If yes, most severe injury (please pick one):  
 No medical attention required \_\_\_\_\_  
 Minor (e.g. laceration) but sought medical attention \_\_\_\_\_  
 Severe (e.g. broken bones) and medical attention needed \_\_\_\_\_  
 One to five hospitalizations required \_\_\_\_\_  
 More than five hospitalizations required \_\_\_\_\_
- 20) If yes, were you raped by your abuser?
- 21) Were you physically abused as a child?
- 22) Have you experienced rape in the past two months? \_\_\_\_\_
- 23) If yes, who was your rapist?  
 Husband \_\_\_\_\_  
 Boyfriend \_\_\_\_\_  
 Acquaintance \_\_\_\_\_  
 Stranger \_\_\_\_\_
- 24) If yes, how many incidents of rape have you experienced?  
 One time \_\_\_\_\_ Six to ten times \_\_\_\_\_  
 Two times \_\_\_\_\_ Eleven to fifteen times \_\_\_\_\_  
 Three to five times \_\_\_\_\_ More than fifteen times \_\_\_\_\_
- 25) If yes, most severe injury (please pick one):  
 No medical attention required \_\_\_\_\_  
 Minor (e.g. laceration) but sought medical attention \_\_\_\_\_  
 Severe (e.g. broken bones) and medical attention needed \_\_\_\_\_  
 One to five hospitalizations required \_\_\_\_\_  
 More than five hospitalizations required \_\_\_\_\_
- 26) Did you experience childhood sexual assault? \_\_\_\_\_
- 27) How long have you been receiving services at this shelter? \_\_\_\_\_ weeks.
- 28) Have you ever received services from a domestic violence shelter? \_\_\_\_\_
- 29) What is your current occupation? \_\_\_\_\_

Packet # \_\_\_\_\_

### Conflict Tactics Scale

Here is a list of behaviors that many women report that their partners have used. We would like you to estimate how often these behaviors occurred during the past year. Your answers are strictly confidential. CIRCLE the number beside each item that best approximates how often each event happened in your relationship with your partner during the past year.

0 = never  
1 = once  
2 = twice  
3 = three to five times  
4 = six to ten times  
5 = eleven to twenty times  
6 = more than twenty times

1. Threatened to hit or throw something at you	0	1	2	3	4	5	6
2. Threw or smashed or hit or kicked something	0	1	2	3	4	5	6
3. Threw something at you	0	1	2	3	4	5	6
4. Scratched you	0	1	2	3	4	5	6
5. Shook you	0	1	2	3	4	5	6
6. Pushed, grabbed or shoved you	0	1	2	3	4	5	6
7. Slapped you	0	1	2	3	4	5	6
8. Punched you	0	1	2	3	4	5	6
9. Kicked, bit or hit you with a fist	0	1	2	3	4	5	6
10. Threw you around	0	1	2	3	4	5	6
11. Hit or tried to hit you with something	0	1	2	3	4	5	6
12. Choked/strangled you	0	1	2	3	4	5	6
13. Beat you up	0	1	2	3	4	5	6
14. Burned you with something	0	1	2	3	4	5	6
15. Threatened you with a knife or gun	0	1	2	3	4	5	6
16. Used a knife or gun on you	0	1	2	3	4	5	6
17. Refused to let you see friends, family, or relatives	0	1	2	3	4	5	6
18. Verbally threatened or intimidated you	0	1	2	3	4	5	6
19. Refused to let you have money for needed expenses	0	1	2	3	4	5	6
20. Forced you to engage in sexual practices against your will	0	1	2	3	4	5	6

21. Refused to allow you to seek psychological or spiritual counseling	0	1	2	3	4	5	6
22. Verbally ridiculed or demeaned you	0	1	2	3	4	5	6
23. Intentionally insulted or humiliated you in front of others	0	1	2	3	4	5	6
24. Denied you access to your paycheck or other forms of money you receive	0	1	2	3	4	5	6
25. Refused to allow you to socialize with people who are important to you.	0	1	2	3	4	5	6
26. Did not allow you to use birth control or refused to use birth control when you requested it	0	1	2	3	4	5	6
27. Refused to allow you out of the house or apartment when you wanted to leave	0	1	2	3	4	5	6
28. Prevented you from eating or sleeping when you wished to	0	1	2	3	4	5	6
29. Forced you to engage in sexual activities that you found painful or distasteful	0	1	2	3	4	5	6
30. Sold or destroyed your personal items	0	1	2	3	4	5	6

Subject ID#: \_\_\_\_\_

Sex: M \_\_\_\_\_ F \_\_\_\_\_

### CAEQ-DV/R

Please think of two episodes of abuse you have experienced. One should be the **most stressful** abusive episode you have experienced. The other should be the **most recent** abusive episode you have experienced (i.e., the one occurring closest to today). If the most recent abusive episode is also the most stressful one for you, pick the **next** most stressful episode as your most recent one.

#### I. Most stressful abusive episode

Please think about your **most stressful** abusive episode and answer the following questions about it. Circle the most appropriate number on the scale after each question.

(1) How discouraged did you feel as a result of this episode of abuse?

1-----	2-----	3-----	4-----	5-----	6
not at all		somewhat		extremely	
discouraged		discouraged		discouraged	

(2) How stressful was your experience of this episode of abuse?

1-----	2-----	3-----	4-----	5-----	6
not at all		somewhat		extremely	
stressful		stressful		stressful	

(3) To what extent was the occurrence of this episode under your control?

1	2	3	4	5	6
Not at all					Completely
under my					under my
control					control

(4) To what extent did your behavior produce this episode?

1	2	3	4	5	6
Not at all					Completely

(5) How confident are you about your control over this episode?

1	2	3	4	5	6
Totally					Totally
unconfident					confident

(6) In the future, how likely is it that you could avoid the occurrence of episodes similar to this one?

1	2	3	4	5	6
Not at all likely					Extremely likely

(7) In the future, how likely is it that you could avoid the occurrence of abusive episodes in general?

1	2	3	4	5	6
Not at all likely					Extremely likely

Please answer the following questions about your control or lack of control over this abusive episode. If you felt you **had control** over the episode circle “**ability**” in each statement. If you felt that you did **not control** the episode circle “**inability**.”

(8) Was the cause of your ability/inability to control this episode due to something about you or something about other people or circumstances?

1	2	3	4	5	6
Totally due to other people or circumstances					Totally due to me

(9) In the future, will the cause of your ability/inability to control this episode again be present?

1	2	3	4	5	6
Will never again be present					Will always be present

(10) Is the cause of your ability to control this episode something that just affects this situation or does it also influence other areas of your life?

1	2	3	4	5	6
Influences just this particular situation					Influences all situations in my life

(11) How important was this episode to you?

1	2	3	4	5	6
---	---	---	---	---	---

Not at all  
important

Extremely  
important

## II. Most Recent Abusive Episode

Please think about your most recent abusive episode and answer the following questions about it. Circle the most appropriate number on the scale after each question.

(12) How discouraged did you feel as a result of this episode of abuse?

1-----	2-----	3-----	4-----	5-----	6
not at all		somewhat		extremely	
discouraged		discouraged		discouraged	

(13) How stressful was your experience of this episode of abuse?

1-----	2-----	3-----	4-----	5-----	6
not at all		somewhat		extremely	
stressful		stressful		stressful	

(14) To what extent was the occurrence of this episode under your control?

1	2	3	4	5	6
Not at all					Completely
under my					under my
control					control

(15) To what extent did your behavior produce this episode?

1	2	3	4	5	6
Not at all					Completely

(16) How confident are you about your control over this episode?

1	2	3	4	5	6
Totally					Totally
unconfident					confident

(17) In the future, how likely is it that you could avoid the occurrence of episodes similar to this one?

1	2	3	4	5	6
Not at all					Extremely

likely

likely

(18) In the future, how likely is it that you could avoid the occurrence of abusive episodes in general?

1	2	3	4	5	6
Not at all likely					Extremely likely

Please answer the following questions about your control or lack of control over this abusive episode. If you felt you **had control** over the episode circle “**ability**” in each statement. If you felt that you did **not control** the episode circle “**inability**.”

(19) Was the cause of your ability/inability to control this episode due to something about you or something about other people or circumstances?

1	2	3	4	5	6
Totally due to other people or circumstances					Totally due to me

(20) In the future, will the cause of your ability/inability to control this episode again be present?

1	2	3	4	5	6
Will never again be present					Will always be present

(21) Is the cause of your ability/inability to control this episode something that just affects this situation or does it also influence other areas of your life?

1	2	3	4	5	6
Influences just this particular situation					Influences all situations in my life

(22) How important was this episode to you?

1	2	3	4	5	6
Not at all important					Extremely important

### COPE-B

These items deal with the ways you've been coping with any difficulties you might be experiencing. There are many ways to deal with stress. These items ask you to indicate how *you* cope. Each item says something about a particular way of coping. Please indicate *how frequently* you've been doing what the item says. Don't answer on the basis of whether it seems to be *working* or not, just whether or not you're doing it. Try to rate each item separately from the others. Make your answers as true *for you* as you can.

Please rate the following coping techniques as they relate to **physical abuse/rape**:

- 1 = I haven't been doing this at all
- 2 = I've been doing this a little bit
- 3 = I've been doing this a medium amount
- 4 = I've been doing this alot

- 1. \_\_\_\_\_ I've been turning to work or other activities to take my mind off things.
- 2. \_\_\_\_\_ I've been concentrating my efforts on doing something about the situation I'm in.
- 3. \_\_\_\_\_ I've been saying to myself "this isn't real."
- 4. \_\_\_\_\_ I've been using alcohol or other drugs to make myself feel better.
- 5. \_\_\_\_\_ I've been getting emotional support from others.
- 6. \_\_\_\_\_ I've been giving up trying to deal with it.
- 7. \_\_\_\_\_ I've been taking action to try to make the situation better.
- 8. \_\_\_\_\_ I've been refusing to believe that it has happened.
- 9. \_\_\_\_\_ I've been saying things to let my unpleasant feelings escape.
- 10. \_\_\_\_\_ I've been getting help and advice from other people.
- 11. \_\_\_\_\_ I've been using alcohol or other drugs to help me get through it.
- 12. \_\_\_\_\_ I've been trying to see it in a different light, to make it seem more positive.
- 13. \_\_\_\_\_ I've been criticizing myself.
- 14. \_\_\_\_\_ I've been trying to come up with a strategy about what to do.
- 15. \_\_\_\_\_ I've been getting comfort and understanding from someone.
- 16. \_\_\_\_\_ I've been giving up the attempt to cope.
- 17. \_\_\_\_\_ I've been looking for something good in what is happening.
- 18. \_\_\_\_\_ I've been making jokes about it.
- 19. \_\_\_\_\_ I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
- 20. \_\_\_\_\_ I've been accepting the reality of the fact that it has happened.
- 21. \_\_\_\_\_ I've been expressing my negative feelings.
- 22. \_\_\_\_\_ I've been trying to find comfort in my religion or spiritual beliefs.
- 23. \_\_\_\_\_ I've been trying to get advice or help from other people about what to do.
- 24. \_\_\_\_\_ I've been learning to live with it.
- 25. \_\_\_\_\_ I've been thinking hard about what steps to take.
- 26. \_\_\_\_\_ I've been blaming myself for things that happened.
- 27. \_\_\_\_\_ I've been praying or meditating.
- 28. \_\_\_\_\_ I've been making fun of the situation.

Subject ID# \_\_\_\_\_



Sex    M \_\_\_\_\_ F \_\_\_\_\_

## ROSE

In this questionnaire, rate each of the statements using the rating scale below (i.e., 1 = disagree, 2 = mostly disagree, 3 = neither, 4 = mostly agree, 5 = agree) Put your rating in the blank provided next to each statement. Please put only one rating next to each item.

There are no right or wrong answers to these statements. The most important thing is to rate each statement in a way that corresponds to your personal feelings.

1. \_\_\_\_\_ I take a positive attitude toward myself.
2. \_\_\_\_\_ I am inclined to feel that I am a failure when it comes to achievement situations that matter most to me (e.g., school, athletics, work etc.).
3. \_\_\_\_\_ I feel that I have a number of good qualities.
4. \_\_\_\_\_ I feel I do not have much to be proud of.
5. \_\_\_\_\_ I am able to do things as well as most other people.
6. \_\_\_\_\_ Sometimes I think I am no good at all.
7. \_\_\_\_\_ I feel I am a person of worth, at least on an equal plane with others.
8. \_\_\_\_\_ I wish I could have more respect for myself.
9. \_\_\_\_\_ I feel that my life is not very useful.
10. \_\_\_\_\_ On the whole, I am satisfied with myself.

### ATTRIBUTION RATING SCALE DV/R

Please answer the following questions about previous **physical violence/rape**:

- 1- Completely False
- 2- Somewhat False
- 3- Neutral
- 4- Somewhat True
- 5- Completely True

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. I did not resist enough   | 1 | 2 | 3 | 4 | 5 |
| 2. I trust people too much   | 1 | 2 | 3 | 4 | 5 |
| 3. I put myself in a situation I couldn't get out of                                 | 1 | 2 | 3 | 4 | 5 |
| 4. There are never any people around when you need them.                             | 1 | 2 | 3 | 4 | 5 |
| 5. I got what I deserved   | 1 | 2 | 3 | 4 | 5 |
| 6. I have bad luck   | 1 | 2 | 3 | 4 | 5 |
| 7. I am basically a bad person   | 1 | 2 | 3 | 4 | 5 |
| 8. It is unsafe for a woman to go anywhere by herself                                | 1 | 2 | 3 | 4 | 5 |
| 9. I cannot take care of myself  | 1 | 2 | 3 | 4 | 5 |
| 10. I was somewhere I shouldn't have been  | 1 | 2 | 3 | 4 | 5 |
| 11. There is too much pornography in this society                                    | 1 | 2 | 3 | 4 | 5 |
| 12. I made a rash decision   | 1 | 2 | 3 | 4 | 5 |
| 13. People are too scared to get involved  | 1 | 2 | 3 | 4 | 5 |
| 14. I am stupid  | 1 | 2 | 3 | 4 | 5 |
| 15. I am a poor judge of character   | 1 | 2 | 3 | 4 | 5 |
| 16. I did not scream for help  | 1 | 2 | 3 | 4 | 5 |
| 17. I did not trust my instincts at the time   | 1 | 2 | 3 | 4 | 5 |
| 18. In certain areas of town, there is never a policeman<br>around when you need one | 1 | 2 | 3 | 4 | 5 |
| 19. I am the victim type   | 1 | 2 | 3 | 4 | 5 |
| 20. I am too impulsive   | 1 | 2 | 3 | 4 | 5 |

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 21. I am not assertive enough                              | 1 | 2 | 3 | 4 | 5 |
| 22. There is too much violence on television               | 1 | 2 | 3 | 4 | 5 |
| 23. This world is filled with emotionally disturbed people | 1 | 2 | 3 | 4 | 5 |
| 24. I did not know how to say no                           | 1 | 2 | 3 | 4 | 5 |
| 25. I am a careless person                                 | 1 | 2 | 3 | 4 | 5 |

### Revised Impact of Event Scale

On \_\_\_\_\_ you experienced \_\_\_\_\_ (rape/abuse)  
(date) (life event)

Below is a list of comments made by people after stressful life events. Please check each item, indicating how frequently these comments were true for you DURING THE PAST SEVEN DAYS. If they did not occur during that time, please circle "not at all".

- |   |            |        |           |       |
|---|------------|--------|-----------|-------|
| 1. I thought about it when I didn't mean to.  | Not at all | Rarely | Sometimes | Often |
| 2. I avoided letting myself get upset when I thought about it or was reminded of it                               | Not at all | Rarely | Sometimes | Often |
| 3. I tried to remove it from memory   | Not at all | Rarely | Sometimes | Often |
| 4. I had trouble falling asleep or staying asleep because of pictures or thoughts about it that came into my mind | Not at all | Rarely | Sometimes | Often |
| 5. I had waves of strong feelings about it  | Not at all | Rarely | Sometimes | Often |
| 6. I had dreams about it  | Not at all | Rarely | Sometimes | Often |
| 7. I stayed away from reminders of it   | Not at all | Rarely | Sometimes | Often |
| 8. I felt as if it hadn't happened or wasn't real   | Not at all | Rarely | Sometimes | Often |
| 9. I tried not to talk about it   | Not at all | Rarely | Sometimes | Often |
| 10. Pictures about it popped into my mind   | Not at all | Rarely | Sometimes | Often |
| 11. Other things kept making me think about it  | Not at all | Rarely | Sometimes | Often |
| 12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.                         | Not at all | Rarely | Sometimes | Often |
| 13. I tried not to think about it   | Not at all | Rarely | Sometimes | Often |
| 14. Any reminder brought back feelings about it   | Not at all | Rarely | Sometimes | Often |
| 15. My feelings about it were kind of numb  | Not at all | Rarely | Sometimes | Often |

#### SCL- 94

Below is a list of problems and complaints that people sometimes have. Read each one carefully, and select one of the numbered descriptors that best describes **HOW MUCH DISCOMFORT THAT PROBLEM HAS CAUSED YOU DURING THE PAST TWO WEEKS INCLUDING TODAY.** (Please place the number selected in the space to the left of the problem/complaint.)

HOW MUCH WERE YOU DISTRESSED BY: \_\_\_\_\_ DESCRIPTORS: 0-Not at all

1-A little bit

2-Moderately

3-Quite a Bit

4-Extremely

Please answer the following questions related to **PHYSICAL ABUSE/RAPE**:

- \_\_\_\_\_ 1. Headaches.
- \_\_\_\_\_ 2. Nervousness or shakiness.
- \_\_\_\_\_ 3. Repeated unpleasant thought that won't leave your mind.
- \_\_\_\_\_ 4. Faintness or dizziness.
- \_\_\_\_\_ 5. Loss of sexual interest or pleasure.
- \_\_\_\_\_ 6. Feeling critical of others.
- \_\_\_\_\_ 7. The idea that someone else can control your thoughts.
- \_\_\_\_\_ 8. Feeling others are to blame for most of your troubles.
- \_\_\_\_\_ 9. Trouble remembering things.
- \_\_\_\_\_ 10. Worried about sloppiness or carelessness.
- \_\_\_\_\_ 11. Feeling easily annoyed or irritated.
- \_\_\_\_\_ 12. Pains in heart or chest.
- \_\_\_\_\_ 13. Feeling afraid in open spaces or on the streets.
- \_\_\_\_\_ 14. Feeling low in energy or slowed down.
- \_\_\_\_\_ 15. Thoughts of ending your life.
- \_\_\_\_\_ 16. Hearing voices that other people do not hear.
- \_\_\_\_\_ 17. Trembling.
- \_\_\_\_\_ 18. Feeling that most people cannot be trusted.
- \_\_\_\_\_ 19. Poor appetite.
- \_\_\_\_\_ 20. Crying easily.
- \_\_\_\_\_ 21. Feeling shy or uneasy with the opposite sex.
- \_\_\_\_\_ 22. Feelings of being trapped or caught.
- \_\_\_\_\_ 23. Suddenly scared for no reason.
- \_\_\_\_\_ 24. Temper outbursts that you could not control.
- \_\_\_\_\_ 25. Feeling afraid to go out of your house alone.
- \_\_\_\_\_ 26. Blaming yourself for things.
- \_\_\_\_\_ 27. Pains in lower back.
- \_\_\_\_\_ 28. Feeling blocked in getting things done.
- \_\_\_\_\_ 29. Feeling lonely.

0-Not at all  
1-A little bit  
2-Moderately  
3-Quite a bit  
4-Extremely

- \_\_\_\_\_ 30. Feeling blue.
- \_\_\_\_\_ 31. Worrying too much about things.
- \_\_\_\_\_ 32. Feeling no interest in things.
- \_\_\_\_\_ 33. Feeling fearful.
- \_\_\_\_\_ 34. Your feelings being easily hurt.
- \_\_\_\_\_ 35. Other people being aware of your private thoughts.
- \_\_\_\_\_ 36. Feeling others do not understand you or are unsympathetic.
- \_\_\_\_\_ 37. Feeling that people are unfriendly or dislike you.
- \_\_\_\_\_ 38. Having to do things very slowly to insure correctness.
- \_\_\_\_\_ 39. Heart pounding or racing.
- \_\_\_\_\_ 40. Nausea or upset stomach.
- \_\_\_\_\_ 41. Feeling inferior to others.
- \_\_\_\_\_ 42. Soreness of your muscles.
- \_\_\_\_\_ 43. Feeling that you are watched or talked about by others.
- \_\_\_\_\_ 44. Trouble falling asleep.
- \_\_\_\_\_ 45. Having to check and double check what you do.
- \_\_\_\_\_ 46. Difficulty making decisions.
- \_\_\_\_\_ 47. Feeling afraid to travel on buses, subways, or trains.
- \_\_\_\_\_ 48. Trouble getting your breath.
- \_\_\_\_\_ 49. Hot or cold spells.
- \_\_\_\_\_ 50. Having to avoid certain things, places, or activities because they frighten you.
- \_\_\_\_\_ 51. Your mind going blank.
- \_\_\_\_\_ 52. Numbness or tingling in parts of your body.
- \_\_\_\_\_ 53. A lump in your throat.
- \_\_\_\_\_ 54. Feeling hopeless about the future.
- \_\_\_\_\_ 55. Trouble concentrating.
- \_\_\_\_\_ 56. Feeling weak in parts of your body.
- \_\_\_\_\_ 57. Feeling tense or keyed up.
- \_\_\_\_\_ 58. Heavy y feelings in your arms or legs.
- \_\_\_\_\_ 59. Thoughts of death or dying.
- \_\_\_\_\_ 60. Overeating.
- \_\_\_\_\_ 61. Feeling uneasy when people are watching or talking to you.
- \_\_\_\_\_ 62. Having thoughts that are not your own.
- \_\_\_\_\_ 63. Having urges to beat, injure, or harm someone.
- \_\_\_\_\_ 64. Awakening in the early morning.
- \_\_\_\_\_ 65. Having to repeat the same actions such as touching, counting, washing.
- \_\_\_\_\_ 66. Sleep that is restless or disturbed.
- \_\_\_\_\_ 67. Having urges to break or smash things.

0-Not at all

1-A little bit

2-Moderately

3-Quite a bit

4-Extremely

- \_\_\_\_\_ 68. Having ideas or beliefs that others do not share.
- \_\_\_\_\_ 69. Feeling very self-conscious with others.
- \_\_\_\_\_ 70. Feeling uneasy in crowds, such as shopping or at a movie.
- \_\_\_\_\_ 71. Feeling everything is an effort.
- \_\_\_\_\_ 72. Spells of terror or panic.
- \_\_\_\_\_ 73. Feeling uncomfortable about eating or drinking in public.
- \_\_\_\_\_ 74. Getting into frequent arguments.
- \_\_\_\_\_ 75. Feeling nervous when you are left alone.
- \_\_\_\_\_ 76. Others not giving you proper credit for your achievements.
- \_\_\_\_\_ 77. Feeling lonely even when you are with people.
- \_\_\_\_\_ 78. Feeling so restless you couldn't sit still.
- \_\_\_\_\_ 79. Feelings of worthlessness.
- \_\_\_\_\_ 80. The feeling that something bad is going to happen to you.
- \_\_\_\_\_ 81. Shouting or throwing things.
- \_\_\_\_\_ 82. Feeling afraid you will faint in public.
- \_\_\_\_\_ 83. Feeling that people will take advantage of you if you let them.
- \_\_\_\_\_ 84. Having thoughts about sex that bother you a lot.
- \_\_\_\_\_ 85. The idea that you should be punished for your sins.
- \_\_\_\_\_ 86. Thoughts and images of a frightening nature.
- \_\_\_\_\_ 87. The idea that something serious is wrong with your body.
- \_\_\_\_\_ 88. Never feeling close to another person.
- \_\_\_\_\_ 89. Feeling of guilt.
- \_\_\_\_\_ 90. The idea that something is wrong with your mind.
- \_\_\_\_\_ 91. Sleeping too much.
- \_\_\_\_\_ 92. Fidgeting, inability to sit, pacing, or fast speech.
- \_\_\_\_\_ 93. Slowed speech, increased pauses before answering, slowed body movements.
- \_\_\_\_\_ 94. Weight loss or weight gain (change of 1 lb. Per week over several weeks or several lbs. Per year when not dieting).

## Sexual Experiences Survey

Have you ever:

- 1) Had sexual intercourse with a man when you both wanted to? Yes No
- 2) Had a man misinterpret the level of sexual intimacy you desired? Yes No
- 3) Been in a situation where a man became so sexually aroused that you felt it was useless to stop him even though you did not want to have sexual intercourse? Yes No
- 4) Had sexual intercourse with a man when you didn't really want to because he threatened to end your relationship otherwise? Yes No
- 5) Had sexual intercourse with a man when you didn't really want to because you felt pressured by his continual arguments? Yes No
- 6) Found out that a man had obtained sexual intercourse with you by saying things he didn't really mean? Yes No
- 7) Been in a situation where a man used some degree of physical force (Twisting your arm, holding you down etc) to try to make you engage in kissing or petting when you didn't want to? Yes No
- 8) Been in a situation where a man tried to get sexual intercourse with you when you didn't want to by threatening to use physical force (twisting your arm, holding you down etc.) if you didn't cooperate but for various reasons sexual intercourse did not occur? Yes No
- 9) Been in a situation where a man used some degree of physical force (twisting your arm, holding you down etc.) to try to get you to have sexual intercourse with him when you didn't want to, but for various reasons sexual intercourse did not occur? Yes No
- 10) Had sexual intercourse with a man when you didn't want to because he threatened to use physical force (twisting your arm, holding you down etc.) if you didn't cooperate? Yes No



11) Had sexual intercourse with a man when you didn't want to because he used some degree of physical force (twisting your arm, holding you down etc.)

Yes No

12) Been in a situation where a man obtained sexual acts with you such as anal or oral intercourse when you didn't want to by using threats or physical force (twisting your arm, holding you down etc.)

Yes No

13) Have you ever been raped?

Yes No